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CONTENTS

PAGE

II. GOOD ROADS AND CONVICT LABOR

III. YEARBOOK OF THE ACADEMY

IV. ESSAYS ON BANKING REFORM IN THE UNITED STATES

By Paul M. Warburg

THE FEDERAL RESERVE BANK BILL[1]

ROBERT L. OWEN

United States Senator from Oklahoma, Chairman of the Senate Committee on Banking and Currency

IT gives me very great pleasure to have the opportunity of presenting to you as briefly as possible the substance of the pending bill, and the purpose of those who are charged with the duty of considering and perfecting that bill.

In the first place, I wish to say that the committee of which I have the honor to be chairman has deeply felt its responsibility. The members have given this question the most careful and painstaking attention. They have desired to hear from every part of the country the different points of view of those who might enable the committee to understand better the great problem before it, and to accomplish its task in a manner acceptable to the country.

I realize that the time is brief in which I may properly hold your attention, and for that reason I shall waste no words in coming directly to the meaning of this bill, its purpose and its plan. The great purpose of the bill is to prevent panic and to give greater stability to the commerce and finance of the United States, to make more efficient the resources which we have in the banking world and to put behind the business of the country the powerful support of the government. The principles of the bill are those which have been worked out successfully in the great civilized nations of western Europe—in England, Germany, France, Belgium, Holland.

The first and most important feature of this bill, in my judgment, is that it concentrates and mobilizes the banking reserves of the nation (which are now not concentrated but widely scattered among 25,000 competing banks), making these concentrated reserves mobile, and more useful to the commerce

[1] Read at the meeting of the Academy of Political Science, October 14, 1913.

and industry of the nation. This will also protect the banks against one another in a dangerous struggle for reserves.

The banks of the nation have fifteen hundred millions of gold, legal-tender notes, and other forms of money, which the United States by the Act of March 14th, 1900, is obliged to maintain at a parity with the gold dollar. Those reserves are held by 25,000 banks. This bill proposes to concentrate a part of these reserves in twelve reserve banks which are "piped" together, if I may use such an expression, by a provision that a Federal Reserve Board consisting of seven officers of the United States, appointed by the President and confirmed by the Senate, shall have the right to require a reserve bank with idle funds to discount for another in need of current funds, thus meeting the needs of commerce. The amount of this reserve will be between four hundred and five hundred millions, after the system has become established, in about three years.

The next important feature of this bill is to permit the issuance of United States notes, treasury notes, called federal reserve notes, to these twelve banks, upon commercial paper, safeguarded by a gold reserve of 33⅓%, and by the resources and double liability of the member banks. The possible issue of these notes is obviously large.

In addition to these two important features, the mobilization of reserves, and the issuance of these elastic notes under conditions which should prevent undue inflation and which should cause automatic contraction, according to the necessities of our commerce, there are various other minor advantages in this measure. The most important advantage is that which, as a necessary corollary, flows from the concentration and mobilization of these reserves and the issuance of elastic currency notes, and that is a constant, stable market for commercial bills of a qualified class, which we do not have to a sufficient extent in the United States, but which has been developed to a very high degree in the European nations. This system will have the great advantage of giving protection for the future against financial panic, and that is one of its great purposes.

There is another important purpose of this bill. At present the great banks in the central reserve cities are almost of neces-

sity compelled to carry a large part of the reserves of the nation as call loans on the stock market. The abatement of this use of the reserves of the country can be accomplished, to the advantage of the ethically managed banks, and to the advantage of the great merchants and business men of the country, who will thus have available for commerce these national reserves, supplemented by elastic currency, whereas these reserves are now held largely, and of necessity, as call loans, for the stock exchange. The effect of this new system will be to stabilize commerce and finance in the republic, and put an end to the violent fluctuations of interest rates on the stock exchange, which have a certain hypnotic effect upon the entire country, frequently affecting most injuriously the interests of those who are concerned in the great commercial enterprises of the nation.

Another advantage proposed by this bill is the opening of this system freely to the state banks and trust companies, just as far as it can be done with safety.

It will have another effect, namely, the lowering of the bank reserves, which will be entirely justified under this system. When the banks carry their reserves in the federal reserve banks, in case of need they can always obtain—not merely sometimes, but always—the discount of their qualified commercial paper, and thus use commercial paper to replenish the reserves in their own vaults.

Another advantage of the bill is that it proposes to protect the two-per-cent bonds, which is obviously a just and righteous thing to do, because the banks bought these bonds upon the understanding that they should have the right to issue currency against them, and in my judgment the bonds ought not to be permitted by the United States to go below par, by reason of any government act or neglect which would lead to such depreciation below par.

Another advantage of the new bill is that it will also lower the current reserves required to be kept against the savings deposits in the national banks, and permit those deposits to be utilized in greater degree in accomodations of an investment character, particularly in the making of farm loans, which under proper conditions can be made a marketable security. A

market could easily be built up for safeguarded farm mortgages and in that way we could greatly stimulate the productive energies of the agricultural sections of the country, upon which we all largely depend for the prosperity of the nation.

This bill, of course, is only a step in the perfection of the financial system of the United States. We anticipate that in the near future a better system can be devised for obtaining long-time, low-rate loans for the agricultural development of the nation. But that is another problem, and cannot properly be involved in a bill of this character.

Another advantage of the bill is that it permits national banks which are qualified to do so to establish foreign branches, and in that way to serve the foreign interests of our great merchants and those engaged in establishing foreign trade for the people of the United States.

Another advantage of the bill is that of clearing checks at par; and that means the clearing of individual checks—not merely the checks of one reserve bank upon another reserve bank, but the clearing of individual checks—by the reserve banks through these federal reserve banks. There is a very large volume of these checks. They are cleared at par in some places, such as Boston, Kansas City, Atlanta and Nashville, but under this proposed system these checks would be cleared through the federal reserve banks everywhere, giving a much higher velocity to the great credit system of the United States. Another obvious advantage is the diminishing of the volume of these current checks by clearing them promptly through the federal reserve banks.

There are certain objections which have been urged very strenuously to the provisions of this bill. The first great objection is that the banks of the country are not given representation on the Federal Reserve Board. The bankers strenuously urge that since they are required to put their money into the stock of these banks, and since they are expected to put certain reserves into these banks, they ought to have the right of representation on the Federal Reserve Board which exercises general supervision over this system. In the bill the banks are authorized to elect six out of nine directors managing each of

the federal reserve banks, while the United States has but three out of the nine, appointed by the Federal Reserve Board. In that way the direct management and safeguarding of the funds in any federal reserve bank is in the hands of men selected by the banks themselves comprising the membership of that particular reserve bank. The appointment of three directors by the United States is more than justified, because the United States is expected to put in its own funds, between two hundred and three hundred millions, and to furnish its credit and power to the system. That is another great advantage of this system. It makes useful to the country from two to three hundred millions of money now locked up in the vaults of the Treasury of the United States. The answer to the demands of the bankers for part of the governmental control is first one of precedent, based upon human experience. The Bank of Germany, the Reichsbank, which is a great public utility bank, has its supervisory board, a curatorium, consisting of five men. At its head is the Chancellor of the Empire, with supreme authority over the Reichsbank. The Prussian Minister of Finance by custom is always nominated by the German Emperor as a member of the curatorium. The other three members of the curatorium are three members of the German Bundesrath, corresponding with our United States Senate. The nine directors who have administrative charge of the Reichsbank are all appointed by the German Emperor upon the nomination of the German Bundesrath. The stock is held individually by private persons who are content with government management. That bank has the right to issue legal-tender notes, elastic notes issued against commercial paper, and automatically retired under a penalty of five per cent interest. That German Bank is a great public utility bank, protecting the commerce and industry of the German Empire, and Germany sets a sound precedent in having its bank a purely government institution. Nobody ever charges it with being a political institution in an offensive sense. It would be regarded as scandalous and impossible for the directors to attempt to use the powers of the great institution for private or partisan purposes. It is impossible to think of such a thing.

The French Bank, the Bank of France, is the great public utility bank of France. Its governor, its sub-governor and the managers of the 188 branches of the Bank of France are appointed by the President of France upon the nomination of the Minister of Finance. The stock is held by private persons, but it is a governmentally controlled bank, so controlled because intended to protect the commerce and industry of the French Republic.

The Bank of England in like fashion is a great public utility bank. It is not so well contrived, in my judgment, as either the Bank of Germany or the Bank of France; but upon the board of governors of the Bank of England is no banker, bill broker, or bill discounter. It has on its board some heads of acceptance houses, however—men familiar with great commercial enterprises, men trained in the school of commerce. The reason for this practise of England, Germany and France, is that these banks are great public utility banks. They are not exercising the function of making money for their stockholders, but they are safeguarding the commerce and industry of these nations, stabilizing the interest rate, protecting the national gold reserve, and giving stability to the business of those nations.

In the United States these federal reserve banks are not to be mere private enterprises for the sole purpose of making money for the stockholders; although it is proposed by this bill to allow stockholders six per cent (I believe that is the consensus of opinion). It is not intended that the policy of these banks, however, should be to make money for the stockholders or directors; their function must be to protect the commerce of the nation, to stabilize the interest rate and to give permanency to the prosperity which this country ought to enjoy continuously, with its wonderful natural resources, and with the mutual patriotic coöperation of the splendid and powerful men who have been developed in the free atmosphere of America.

Another objection urged by the bankers to this proposed bill is that the government should not issue the currency; that the currency ought to be issued by the banks. The answer to that

is first an economic one. It may be argued that a bank note corresponds with a bank deposit, and the argument has validity as far as it goes—that is, in as far as the depositor of the bank would be content to receive the note of the bank in exchange for his deposit, but that does not state the whole truth. Those notes are made current throughout the United States. The government of the United States by Act of March 14, 1900, is compelled to maintain those notes on a parity with the gold dollar; and ought to be so compelled, because those notes are current from hand to hand among our citizens, and no citizen ought to be required to pause for a moment to ascertain the condition of the bank emitting that note. When he takes a dollar under the safeguard of this great nation of ours he ought to be assured that that dollar is as good as a gold dollar. For that economic reason it is better that the dollar which is issued should be a dollar issued by the government of the United States as a direct government obligation. After all, the government is obliged to redeem it under the law. Even the holder of a national bank note has the right to demand redemption in legal tender, and the holder of legal tender has the right to demand redemption in gold; and the Act of March 14, 1900, requires the United States to maintain these national bank notes and all other current money on a parity with gold. So, since the note of all of the people is better than the note of some of the people, and since it is obviously a wise economic policy to have the dollars which are current throughout our country of the very highest character, the attitude of the administration in having these federal reserve notes government notes is fully justified. Moreover, the issue of such currency has a positive money earning power of over one per cent which ought to belong to and be enjoyed by the United States and not by private bankers.

There is also a political reason. The Democratic national platform has three times in the last sixteen years declared against the issue of the money of the nation by private corporations and in favor of the issuance of the currency by the nation itself.

The country banks have raised a great cry against the clear-

ing of individual checks at par by the federal reserve banks. They say that they will lose money by it. The answer to that is that this bill provides that they may charge their customers for these checks. They reply that their "customers will not stand for it;" that they prefer to have these checks charged to the merchants of the cities; that is, that when these checks come back to the country banks for collection they will then charge collection and exchange to the merchants in the cities, who receive these local checks and send them for collection, under the obvious idea that the merchants of the cities are not aware that they are being taxed in this small way, and under the idea, I suppose, that the customers of the country banks are making a profit at the expense of the city merchants, and that the city merchants have no way of recouping themselves. I take it that the city merchants are able to take care of themselves in a trade of that kind, and that the charge at last rests where it belongs, upon the local customer of the country bank. The bill can easily provide that the Federal Reserve Board shall fix the rates to be charged upon these checks, and the country banker need not lose anything he is justly entitled to. If he transfers funds from a country town to St. Louis, Chicago, or New York, he performs for the depositor a service for which he has a just right to charge. The Federal Reserve Board can fix that charge so there will be no extortion on the one side or failure to pay justly on the other.

I have given you a brief sketch of this matter, and if because of the brief time I am privileged to speak I have not covered certain points so as to be perfectly clear, if any gentlemen desire to ask me any questions I shall be glad to answer them.

A VOICE: Have you or the administration any objection to the Federal Reserve Board being appointed for life in a similar manner to the Supreme Court justices, in order that there may be no suspicion of political influence? Has that thought been considered at all?

MR. OWEN: No, that thought has not been considered. Nobody has ever suggested a life appointment. The directors of the German Bank are appointed for life, but in our country men live too long to be appointed for life. They may become

decrepit. They may become afflicted with mental decadence or with physical weakness. They may become from a variety of physical or mental causes unfit to continue in office. But it has been thought wise to give them a term of eight, ten or twelve years—a sufficient length of time to make the positions attractive to great men. No man ought to go on that board who is not a great man, the equal intellectually, morally, ethically, in every respect, of any man who adorns our great Supreme Court bench.

A VOICE: Do you think an eight-years' appointment would bring these great men ?

MR. OWEN: I think it would. We have a great many men in this country who, having made their own fortunes and having distinguished themselves in commerce and finance, would be willing and glad to render public service to their countrymen.

MR. SELIGMAN: A great many people seriously question the right, or advisability, of the Federal Reserve Board's compelling the reserve banks to discount for one another. That is a thing that has caused trouble in the minds of a great many people.

MR. OWEN: The nearest approach we can get to a central bank with twelve regional banks is to "pipe" the regional banks under the safeguard of a wise and conservative administration.

MR. SELIGMAN: Is it a safe coöperation?

MR. OWEN: It is as safe as to put the funds in a common reservoir with no requirement of coöperation needed.

A VOICE: Why should the national banks be compelled to go into the organization?

MR. OWEN: They are not compelled to come into the organization. They can go out of it if they don't like it. The national banks of this country have been formed in accordance with the national banking law. Our banking system has proved to be a great commercial system for the United States. It has developed the industry of the little village and of the cross-road. It has preserved the savings of the people of the small town for use in that town, and in this way has preserved the unit upon which the greatness of America must rest and does rest. These

national banks which have been built up are of necessity supervised by the government, because our system is different from the branch banking systems of Europe, where one great banking house puts a branch here, there and yonder, and with its by-laws controls each branch.

Through the provisions of its banking laws and the checks provided by the comptroller of the currency and his examiners, the United States government provides for the protection of the smaller banks against the unwisdom and inexperience which might easily be found where a few men come together with $25,000 in a small town and go into the banking business without experience in that business. The government places at their disposal the large banking experience of the country. The small banks are instructed continuously against putting themselves in jeopardy by unwise banking. When the government of the United States establishes this new system, which has been found necessary to prevent panics, and gives the national banks as well as the state banks and trust companies the advantage of coöperation, under government safeguard, if a national bank happens to be unwilling to conform to the reasonable and just requirements demanded by the national welfare and the bank's own best interest, it would be a vital error on the part of the government to permit this whole system to be destroyed, by leaving it optional whether a bank avails itself of it or not. If the indifference of a bank, its lack of understanding, its apathy, its neglect or its ignorance of the law and its advantages is to be controlling, the system would not be established with any certainty. Men would stand off and say, "Let others join this ; I will see how it works before I go into it." The consequence would be that the possible advantages of this system would not be realized. It is a righteous and just thing that when the government has worked out carefully the details of this plan, and after long study is well assured of its advantages, having put the microscope upon the bill with extreme care to see that it is just and sound in every particular—it is righteous and just, I say, to make the plan compulsory. Obviously the system itself cannot be permitted to fall by leaving it merely optional. It ought to be made a success. It deserves

to be made a success. The national interest requires and therefore justifies it.

A VOICE: It seems to me that there are two viewpoints. In the first place, if the national banks, which hold about one-third of the banking resources of the country, do not come in, the state banks are quite apt not to come in. And if the national banks are compelled to come in if they do not want to, why should not they have the option of having their bonds redeemed at par? How can the system be a success if only one-third of the banks come in?

MR. OWEN: The national banks have about eight thousand millions of resources. The state and other banks have about nine thousand millions of resources, and they are abundantly strong to make this system a success. I have not the slightest doubt in the world that the national banks will as a class almost unanimously avail themselves of this system. The proper attitude of the government toward the bonds I have already explained.

THE OPPOSITION TO THE FEDERAL RESERVE BANK BILL[1]

CARTER GLASS

Representative from the Sixth Congressional District of Virginia, Chairman of the House Committee on Banking and Currency

IT is generally agreed that there is a pressing necessity for currency legislation in this country. The country itself thinks so, if any significance may be attached to the thousands of letters received by the banking and currency committee of the House within the last six months, or to the resolutions passed by hundreds of commercial bodies throughout the United States, calling for immediate consideration and action by Congress. From every quarter and from all classes of citizens the demand has proceeded.

For more than a quarter of a century there have been strong symptoms of an intense dissatisfaction with the prevailing national banking and currency system, and this spirit of discontent has been accentuated as from time to time the utter inadequacy of the system has been made manifest in periods of financial peril. While the existing system has operated satisfactorily under ordinary business conditions, and while the administration of the system for the fifty years of its history furnishes a high tribute to the integrity and efficiency of those concerned in its operation and oversight, its very best friend is bound to admit that in time of stress and storm it has broken down utterly. This has occurred so often, and the ensuing disaster has been so dreadful as to cause the banking experts of other nations and practical financiers everywhere to marvel at our continued failure either to adopt a better system or to correct the evils of the one we have. While we may boast that no note holder has ever lost a dollar and that the losses of depositors constitute an inconsiderable percentage of the total

[1] Read by title at the meeting of the Academy of Political Science, October 14, 1913.

liabilities of the banks, nevertheless the failure of the system in acute exigencies has caused widespread business demoralization and almost universal distress. Five times within the last thirty years financial catastrophe has overtaken the country under this system, and it would be difficult to compute the enormous losses sustained by all classes of society—by the bankers immediately involved, by the merchants whose credits were curtailed, by the investors whose shops were closed, by the railroads whose cars were stopped, by the farmers whose crops rotted in the fields and by the laborers who were deprived of their wages. The system breaks down in emergencies.

For years, the business and banking mind has been casting about for a remedy, but into the story of this quarter-century of ineffectual efforts for reform I have no time to go. Suffice it to say that all political parties are now committed to a solution of this problem, and the public is demanding prompt action. The chief and everlasting curse of attempted banking and currency legislation in this country has been the proneness of public men to procrastinate. When the Vreeland-Aldrich makeshift was adopted, ex-Secretary Lyman J. Gage warned the committee and Congress that the bill was " merely a dangerous narcotic to lull the nation to sleep, from which slumber it would some day awaken in agony." We should no longer, from habit or timidity, gravely shake our heads and insist that we " will not be hurried in this matter," that we want further time for consideration, that we must have other hearings and additional information. Sometimes I am led to wonder what sort of information is wanted by the men who continually plead for delay. There is no theme on earth upon which information may be more readily obtained than upon the currency question; there is no topic upon which we have more authoritative expert expression; and there are few subjects upon the general principles of which expert opinions are in greater accord. If it did no other good, the National Monetary Commission, at a cost of approximately one hundred and fifty thousand dollars, assembled a great library on the subject of banking and currency reform, which for two years has been accessible to every member of Congress and to the public. Less than six

months ago the banking and currency committee of the House closed exhaustive hearings on this subject, at which representatives of every important known national group testified—big bankers and little bankers, merchants and farmers, credit men and manufacturers, currency experts, laboring men and textbook writers. There is scarcely a provision of this pending currency bill which may not be related to those hearings. They took the widest range and reflected every conceivable variety of opinion and there is absolutely no excuse for further delay.

The limited time allotted to me, therefore, I shall devote to the consideration of the three most prominent criticisms which have been made against the bill. It is urged: first, that the bill confers dangerously autocratic powers upon the Federal Reserve Board, an alleged political board, and that the banks should be given direct representation upon this board; second, that it is unjust and confiscatory to require national banks to join the system on penalty of forfeiting their national charters if they fail to do so; third, that it is unreasonable and contrary to the best banking practise to deny to banks joining a regional reserve bank the privilege of counting deposits with reserve agents as lawful reserve money.

These are the three criticisms which have been most persistently and vigorously hurled against the bill. If one accepted them with the broad generalizations and predictions of dire calamity with which they are usually made, he would be forced to conclude that the very foundations, not only of sound banking, but also of justice and business morality, were being assailed. In reality, these features of the bill contain nothing that is either new or startling.

The Federal Reserve Board is essentially a supervisory board, and clearly should not represent any section, faction or type of business interest. It should represent the public as a whole. There is only one way of securing a board of this kind, namely, to have it appointed by the President of the United States, who alone is the elected representative of the entire nation. That is the way we select the Secretary of the Treasury and the comptroller of the currency, in whom have been vested for half a century by the national banking act

many of the powers conferred by this bill upon the Federal Reserve Board. That is the way we select the interstate commerce commission, whose actual power over the railroads of the country is much greater than that which will be exercised over the banks by the proposed Federal Reserve Board.

When the Aldrich plan was before the country, the European bank which its sponsors most often cited as a helpful example for the United States and the one to which they gave more attention in their report than to all the others combined, was the Imperial Bank of Germany. The following brief description of the control of the Reichsbank is taken from an interview with two of its officers, which was published by the monetary commission: [1]

[The capital] is all private ownership. . . . The government owns no shares. [In our organization] we have, so to speak, three boards: first, the Curatorium; second, the Direktorium (president and directors); third, the Central Ausschuss [or Central Committee]. The Curatorium is composed of five members. The chairman is the Chancellor of the Empire. The Emperor appoints the second member, and it has been the custom to appoint the Prussian Minister of Finance. The Bundesrath [the upper house of the imperial legislature] appoint from among their own number three members, which completes the Board. . . . In the Chancellor lies supreme power although he has exercised it but once in the history of the bank.

The Direktorium . . . is appointed by the Emperor for life. It consists of nine members, seven of whom are directors, and two of whom are the president and vice-president, respectively. The president and the other members of the Direktorium are recommended by the Bundesrath to the Emperor, who makes the appointment. In the case of the directors, the advice of the Central Ausschuss is heard.

The third body . . . [namely, the Central Committee] is composed of fifteen stockholders who are elected at the annual meeting of the stockholders, together with fifteen alternates, who serve in the absence of any of the members of the board. . . . The Central Ausschuss [Committee] are made familiar with the transactions carried on by the

[1] *Interviews on the Banking and Currency Systems of England, Scotland, France, Germany, Switzerland and Italy.* Publications of the National Monetary Commission. Sen. doc. 405, 61st Cong., 2d sess., pp. 335-7. Brackets indicate explanatory matter not in original.

bank, and give their advice and recommendations to the Direktorium in reference thereto. In practise, their advice is generally carefully considered and taken. . . . The management is so constituted that the government has actual and final control through the Curatorium. The business of the bank is transacted by the second body, the Direktorium.

Here we have one of the most successful banks of Europe—a bank which possesses practically every power that the bill before Congress would confer upon the Federal Reserve Board and upon the regional bank boards combined, and which, in addition, does a regular banking business with the public, competing with other banks. It has a practical monopoly of note issue, it is the depository of government funds, it holds the bulk of the bank reserve money of the empire, and it performs for banks and public alike most of the transfer and exchange business of the country. Yet this situation is controlled almost absolutely by politically appointed boards. The administration's plan does not begin to go so far in the direction of government control, since the real banking functions in the proposed plan are entrusted to the boards of the regional banks, two-thirds of whose members are elected by bankers, the functions entrusted to the Federal Reserve Board being almost entirely supervisory functions except a few carefully guarded ones which will be exercised only in times of great emergency, and then in the searching light of publicity.

Although the members of the Federal Reserve Board will all be appointed by the President of the United States, the board will not be a political board in any narrow sense of that term. It is my earnest conviction, based upon long and serious reflection, that no man can conceive—as none has yet pointed out—how any part of this system can be perverted to political uses. In my judgment, if the United States has ever had a President ingenious enough to do this evil thing, it has never had one desperate enough and will never have one shameless enough thus to betray the confidence of the nation. I happened to be present when an eminent banker suggested such a possibility to the present occupant of the executive chair, and heard this banker promptly challenged to show how it might be done. I

shall not soon forget the emphasis with which the President of the United States declared that no man would ever be found willing to imperil his reputation or tarnish his fame by so flagrant a prostitution of his high office. The X-ray of publicity is turned full upon the operations of the Federal Reserve Board. There can be nothing sinister about its transactions. Meeting with it at least four times a year, and perhaps oftener, will be a bankers' advisory council, representing every regional reserve district in the system. This council will have access to the records of the board, and is authorized to give advice and offer suggestions concerning its general policy. How could we have exercised greater caution in safeguarding the public interest?

The second criticism of the bill relates to the so-called compulsory feature. Critics allege that it is unjust and confiscatory to compel national banks to invest part of their capital in a federal reserve bank, on penalty of forfeiture of their national charters if they fail to do so. Many of these same critics, however, have been for years criticizing the federal government for its inadequate and unscientific national banking laws, under which the country's credit system has again and again broken down, to the distress of banker, merchant, farmer and laborer alike. Now the national government is about to effect a thorough-going reform of these same defective banking laws, in the interest of the entire public. To be successful, the newly-created federal reserve banks must be strong and must inspire confidence from the start. If sacrifices are involved in joining the new system, these sacrifices should be borne by all, not merely by those bankers who are at once wide-awake and public-spirited. I ask you in all fairness, is it unreasonable for the government to say to the national banks, "If you wish to retain the name 'national,' and to enjoy the privileges which are conferred upon banks chartered by the national government, you must assume the obligations which the national government believes the dictates of sound banking require in the public interest. If you do not wish to do so, you are perfectly free to give up your federal charter and to accept the privileges and assume the obligations which state charters involve. You may have a year to decide, but if you are to remain permanently in

the national system, you must expect to play the game according to the national rules."

The real opposition to this bill, however, is not as to government control, upon which we shall never yield. It is not as to compulsory membership, which was provided in another way in the Aldrich scheme, a scheme that was unanimously endorsed by the American Bankers' Association. It is not as to the required capital subscription or the five-per-cent dividend. It is none of these. It is as to that most vital requirement of the bill, that in the future, funds on deposit in other national banks cannot be counted as legal reserve. This means an immediate loss of profits to many bankers—I say immediate, for in the long run the change will benefit bankers as well as the public—and it is the prospect of this loss that explains most of the organized opposition to the bill.

The fight is to drive us from our firm resolution to break down the artificial connection between the banking business of this country and the stock speculative operations at the money centers. The monetary commission, with more discretion than courage, absolutely evaded the problem; but the banking and currency committee of the House has gone to the very root of this gigantic evil, and in this bill proposes to cut the cancer out. Under existing law, we have permitted the banks to pyramid credit upon credit, and to call these credits reserves. It is a misnomer. They are not reserves, and when financial troubles come and the country banks call for their money with which to pay their creditors, they find it is invested in stock-gambling operations. There is suspension of payment and the whole system breaks down under the strain, causing widespread confusion and almost inconceivable damage. The avowed purpose of this bill is to cure this evil, to withdraw the reserve funds of the country from the congested money centers and to make them readily available for business uses in the various sections of the country to which they belong. This we propose to do cautiously, without any shock to the existing arrangement, graduating the operation to prevalent conditions, and extending it over a period of thirty-six months. This affords ample time to the reserve and central reserve city banks to adjust conditions

to the reserve requirements of the new system. Out of abundant caution, we have allowed actually longer time than the best practical bankers of the country have said was needed. But the complaint of these critics is not as to the time, but as to the fact. They do not want existing arrangements disturbed; they are willing to perpetuate a defective, unscientific system sanctioned by law but condemned by experience and bitterly offensive to the American people—a system which everybody knows encourages and promotes the worst description of stock gambling.

In conclusion, let me repeat: the time for action on this great question is now, while the public interest is alive, and while we can act with that caution and deliberation which is impossible when the country is in the throes of a financial panic. To those who advocate further delay in the hope thereby of securing legislation which they consider more conservative or more favorable to the banking interests, I say with all the seriousness at my command, that they are pursuing a false hope. The most vigorous opposition to this bill has been from those who want a more radical measure. If legislation now is postponed until the public is goaded by another panic, you may rest assured that the resulting legislation will be more radical—yes, far more radical—than that contained in the present bill.

THE FEDERAL RESERVE ACT: A REPLY TO CRITICISMS[1]

ROBERT J. BULKLEY

Representative from the Twenty-First Congressional District of Ohio, Member of the House Committee on Banking and Currency

IT is obviously impossible within the limit of time at our disposal either to explain fully the Owen-Glass bill, or to discuss fully all the criticisms that have been leveled against it. I shall assume that the bill has been sufficiently explained to you already, and that you understand its purpose and general outline. I desire to treat some of the criticisms which have been made against the bill and to discuss them from a point of view slightly different from that which Senator Owen has adopted.

In selecting the criticisms to be discussed, I have decided to take up those of the Honorable A. Piatt Andrew, formerly assistant secretary of the treasury, former secretary of the National Monetary Commission, and one of the authors of the Aldrich plan, and the criticisms made by the American Bankers' Association. I do this because Dr. Andrew is a thorough student of the subject, and his connection with the Aldrich plan entitles his criticism of our plan to careful consideration; and because the American Bankers' Association may be presumed to represent in the most official way that body of men which is most directly interested in the bill.

Dr. Andrew insists principally upon three criticisms. He criticizes the number of the reserve banks which we propose to establish. He criticizes the provision with respect to note issues, and expresses the fear that the bill will result in a great inflation. He also criticizes, but does not so much emphasize, the danger of political control and the so-called compulsory membership of national banks in the federal reserve banks.

[1] Address at the meeting of the Academy of Political Science, October 14, 1913.

The American Bankers' Association, on the contrary, suggests the danger of a great contraction. They attack the constitutionality of the measure, but lay particular emphasis upon the compulsion—the driving of the national banks into membership in this organization—and upon the feature of exclusive governmental control.

We all know that it is easier to criticize than to construct. It therefore seems fair that in analyzing the criticisms of this bill, we should compare the constructive work of our critics with our own work. I shall therefore take the liberty of comparing the provisions criticized in our bill with the corresponding provisions of the Aldrich plan, of which Dr. Andrew is one of the authors, and which was unanimously endorsed two years ago by the American Bankers' Association in New Orleans.

To take up the criticisms, then,—first, the criticism has been made of the proposed establishment of twelve regional reserve banks, and the American Bankers' Association has suggested that the number be reduced to not more than five. But the representatives whom they delegated to present their criticisms to the Senate committee on banking and currency were frank to say that the real preference of the association was for one central bank, as provided in the Aldrich plan. They say that the establishment of as many as twelve regional banks will so divide up the reserve money of the country that the proposed mobilization of reserves will not be effective. It is admitted, I understand, that the power given to the Federal Reserve Board to compel one regional bank to rediscount for another would measurably offset the dangers arising from a scattering of the reserves among twelve regional banks, but it is contended that this power is in itself a dangerous element because of the possibility that it might be abused for political purposes, which means, presumably, purposes of partisan politics. In fact, the power could not be so used, because, by the terms of the bill, rediscounts may be compelled only upon the unanimous vote of the Federal Reserve Board, which must have in its membership at least two representatives of political parties not in power.

Let us examine the alternative of one central bank, as provided by the Aldrich plan. Under that plan the central bank

was to rediscount the paper of the constituent banks through its branches. It is not clear whether this meant that the paper offered for rediscount was to be passed upon by the central board, by the board of directors of the local branch, or solely by the branch manager, who was to be the representative of the central bank. Any of these methods would be much inferior to the provisions of the Owen-Glass bill; because if the central board were to undertake to handle the matter directly, either it would have to depend absolutely upon the judgment of its one representative; or if either the board of directors or the executive committee should attempt to exercise its own judgment, it would act under the disadvantage of lack of familiarity with local credits and conditions. If this function were entrusted to the board of directors of the local branch, those directors would be placed in a position of lending the money of the central bank to the constituent banks which elected them to office. In other words, the banks to whom the members of the local boards owed their positions would be interested 100% as borrowers, and only about 7% as lenders. Thus there would be a much stronger pressure to accept questionable paper than if the local board were lending the money of its own constituent banks.

Each independent regional bank under the Owen-Glass plan would have a territory approximately equal to that of one of the branches under the Aldrich plan, and it could therefore be presumed that the directors would have about the same degree of familiarity with local credits and conditions as the directors of the branches under the Aldrich plan, but under the Owen-Glass plan their responsibility as lenders would be as great as their responsibility as borrowers, which would not have been the case under the Aldrich plan.

Turning now to the question of note issues, the currency provided for by the Aldrich plan was to consist of notes of the National Reserve Association, to be issued in the discretion of the directors of the association. These were to be redeemable on demand in lawful money, and behind them there was to be held nominally a reserve of 50% in lawful money. I put some emphasis upon the word "nominally," because practically the

reserve required was considerably less than 50%. In the first place, the reserve was to be held against all demand liabilities, including deposit liabilities. But from the aggregate amount of such liabilities there was permitted a deduction of some $350,000,000 before computing the required 50% reserve. Then it was possible for the board of directors to go below the 50% reserve in their discretion, the only penalty being the payment of a graduated tax on the amount of the deficiency. But, inasmuch as the payment of this tax would not affect the dividends to be paid to the banks which elected the directors and would only reduce the amount of profit going to the government, which had only a small minority representation on the board of directors, it will be seen that there would not be much inducement to keep up the reserve if the interest of the banks would be served by letting it go down.

The notes issued by the reserve association would have been available as reserve money in the constituent banks, and inasmuch as they were to be legal tenders for debts due to the government and to the banks, there would be practically no inducement to present them for redemption. And in fact there would have been no redemption of these notes except as they happened to come into the central bank in the ordinary course of business. Therefore the element of elasticity was entirely lacking, ready means being provided for the expansion of note issues without check even by any government representative, and no inducement existing for the contracting of such issues.

Under the Owen-Glass plan the proposed federal reserve notes will come back for redemption as soon as they have served their immediate purpose, because they cannot be counted as reserve money by constituent banks, because the collateral specifically placed behind them will be constantly maturing and cannot be replaced without the consent of the Federal Reserve Board, and further, because the federal reserve banks borrowing such notes will be paying interest upon them, which interest will be a real charge against the possible profits of their stockholders. Mr. Vanderlip has suggested that the proposed federal reserve note issue would lack the quality of easy contraction because the notes would to a large extent become impounded

in the reserves of state banks not members of the system. He could fairly have said this—and more—in criticism of the Aldrich notes, but in saying it about the notes provided in the pending bill he overlooks the fact that these notes may be redeemed in the same manner as existing national bank circulation, that is to say, by the deposit of lawful money in a fund to be held in trust for the redemption of the notes. The impounding of lawful money in such a trust fund has, of course, the same effect in contracting the circulation as the actual return and retirement of the notes themselves. The federal reserve notes of the Owen-Glass plan have, therefore, complete elasticity—a quality which the Aldrich notes would not have had.

Dr. Andrew says he is afraid of "greenbackism," which means—if it means anything—the issue of currency upon the mere fiat of the government, without actual value behind it, and the danger of it lies in inflation of the currency. Yet the federal reserve notes can be issued only when 100% of prime commercial paper plus 33% of lawful money is actually deposited to secure them; that is, there must be $1.33 of good security directly hypothecated to secure every dollar of such notes in circulation. This is very far from fiat money. And if it be urged that there is still danger of the inflation of such an issue, I will remind our critics that these notes can be issued only upon application of the banks themselves. Inflation could not follow except as the result of the bad judgment of the bankers of the country. And if it is to be presumed that the bankers will use bad judgment, what would have saved us from inflation under the Aldrich plan with its looser requirements as to security behind the notes? The Owen-Glass plan, however, provides a further check against inflation because it gives the Federal Reserve Board the absolute right to stop it—a safeguard not contained in the Aldrich plan.

The American Bankers' Association, although it once indorsed the Aldrich plan *in toto*, has apparently seen new light since taking that action, and last week in Boston it indorsed the amendments to the pending bill prepared by its currency commission and adopted last August by the so-called Chicago bankers' conference. The bankers' association now proposes

a note issue by the federal reserve banks, with the permission of the Federal Reserve Board. This permission is an important check against inflation not provided by the Aldrich plan. As proposed by the bankers, however, it would only half accomplish the purpose; it would give the Federal Reserve Board the power to prevent too many notes going out, but would not enable it to force them in by raising the rate of interest on the notes or by refusing to permit paper deposited as collateral to be replaced at maturity. So far as elasticity is concerned, this note issue proposed by the bankers would be fairly subject to Mr. Vanderlip's criticism. Notes impounded in reserves of non-member banks could not be redeemed, and therefore the issue would not have the same power of contraction as is provided under the Owen-Glass plan.

None of the arguments ordinarily used against a government note issue is fairly applicable to the plan proposed in the pending bill, and it does seem as though the objections now being urged are to a large extent sentimental, or else based upon an unwillingness to recede from a dogmatic position that the government should not issue notes. Nobody seriously contends that there is the slightest danger of the government ever being called upon to make good any loss arising from the inability of the banks to maintain the proposed note issue. Yet it is more or less seriously suggested that if such an impossibility should occur, it might be very embarrassing to the government. So it might; but in such a contingency I do not hesitate to say that I would prefer to have the government take the loss and suffer the embarrassment attendant upon it, rather than to have such a loss fall upon the innocent holders of the notes.

Much has been made of the contention that a bank ought to have as good a right to supply its customers with credit in the form of notes as in the form of book accounts. I cannot believe that this is the real issue: the banks do not want merely the right to put their promise to pay on a piece of paper and let it circulate as far as it will. A certified check endorsed to bearer would accomplish that, but would come back for redemption too quickly to suit them. What they want is an issue of notes produced by the government bureau of printing and engraving,

an issue which the laborer, the farmer, and the people generally, excepting only those technically educated in banking, will think is money and will hold as money. The distinction between a bank note and currency is perhaps not very well founded technically, but practically in this country it is a very real one, as we have all been brought up to the use of government currency and we all feel a little bit safer when we receive for our property or services a note with the government's mark on it. This, too, may be in part sentimental, but it is as well founded in logic as any uncompromising prejudice against government currency, and it is a sentiment pretty widely felt by the people of this country.

I hope the members of this Academy will consider the suggestions I have here made with this question in mind: Could we provide such an adequate system of redemption as we have here provided, could we provide the same amount of public satisfaction that the proposed note issue will give, in any other way than by government currency issued through the banks? Remember, too, that the Federal Reserve Board cannot bring about inflation but may always stop it, and may at any time force contraction. By no possibility can credit or currency inflation occur without the prior application of the bankers themselves.

Dr. Andrew takes occasion to express the fear that the rediscount provisions of the Owen-Glass bill may result in great inflation. There is no time to go into figures here, but it may be conceded that an inflation would be possible under the rediscount and reserve provisions of this bill, though the possible inflation would not be nearly so great as the inflation made possible by the corresponding provisions of the Aldrich plan. Under either plan much would depend upon the discretion and good judgment of those in control. But this important consideration must always be borne in mind: Inflation would be impossible under either plan unless the bankers permitted it; under the Aldrich plan if the bankers wanted to permit it, they would do so, but under the Owen-Glass plan if the bankers wanted to permit it, they might still be checked by the government representatives.

Personally I agree fully with Dr. Andrew's suggestion that suspension of reserve requirements should be automatic rather than discretionary, and I am free to admit that in my judgment our bill allows to the Federal Reserve Board an unnecessary discretion on this point. Nevertheless, it is still better than the Aldrich plan which Dr. Andrew advocates, because, as we have already seen, the tax on deficiencies therein provided was a tax which would not fall upon those responsible for the deficiency. Furthermore, the Aldrich plan did not even propose to tax deficiencies in reserves of the member banks. The pending bill provides that if the Federal Reserve Board does permit a deficiency in reserves, it must impose a graduated tax upon such deficiency, and this tax does fall upon those who are responsible for the deficiency, whether they be federal reserve banks or constituent member banks.

Turning to the criticisms of the American Bankers' Association, prepared by their currency commission, and recently endorsed by the association at its Boston meeting, the report of that commission seems to have been written in bad temper and does not seem consistent with the dignity and fairness which such a body ought to possess. It states that the pending bill imposes great hardships on the banks and on the public generally. Some of the alleged hardships on the banks are specified, but there is no specification of the hardships which are said to be inflicted upon the public, except an implication that the bill would cause capital to be withdrawn from business, or in other words, that the bill would cause a contraction of credit. The association seems willing to make this implication, though unwilling to make the direct statement that credit would be contracted. Mr. James B. Forgan of Chicago and Mr. Arthur Reynolds of Des Moines, president of the American Bankers' Association, individually predicted a great contraction. Mr. Reynolds made no argument to support his prediction, and Mr. Forgan's argument on the subject has already been completely refuted. Such eminent bankers as Mr. Vanderlip, of this city, Mr. George M. Reynolds of Chicago and Mr. Sol Wexler of New Orleans admit that the reserve provisions of the pending bill are correct in theory and ultimately workable, though I be-

lieve they express some doubt as to whether there may not be a little embarrassment during the period of readjustment to the new conditions. In any case, the contraction argument has been thoroughly exploded.

The report approved by the bankers' association proceeds to question the constitutionality of the pending measure, on the ground that the provision requiring national banks to buy stock in the federal reserve banks amounts to depriving them of their property without due process of law. The fact is that the statute under which the national banks are chartered reserves to Congress the right to alter, amend or repeal. The situation has been best explained by my colleague, ex-Governor Montague of Virginia, whom I quote:

> In this bill no bank is required to enter the banking business under the new provisions, and there is no confiscation of existing banks upon failure so to do. It is true there is a dissolution of existing charters after the expiration of a certain time, a power to impose such a dissolution having been reserved in their charters and accepted by the existing banks. None of the imaginary hardships and confiscations predicted can come to any bank unless it voluntarily enters the system containing these regulatory provisions.
>
> The contract, therefore, is the reserved right of Congress to amend or repeal these charters—contracts assented to when the several banks were organized—and if the banks now resist such amendment or repeal it is they who violate the contract and not the government.

Governor Montague also cites the case of Noble State Bank *v.* Haskell,[1] decided by the Supreme Court of the United States, which involves almost the identical question here presented. At a dinner of the Economic Club in Boston last week, I called these arguments to the attention of the gentleman who was present as representative of the American Bankers' Association, and who was a member of the currency commission which prepared the resolutions. I challenged him to say whether his commission had considered the question, and whether he himself believed that the bill was unconstitutional. His answer was that he did not know, nor care, whether the provision was

[1] 219 U. S. 104.

unconstitutional or not. Possibly the members of the American Bankers' Association do not care much about constitutional questions, but when they pass resolutions charging that a bill publicly endorsed by the President of the United States and passed by the House of Representatives is an unconstitutional measure seeking to confiscate their property, they ought to care whether what they say has any foundation or not.

The final question raised is that of government control. That is really the big issue, the issue which more than any other up to this time seems irreconcilable, although the bankers have come far in admitting that the government ought to have a majority of the controlling board. I think I should be somewhat lacking in frankness, if I did not say that in my judgment there is some danger of political control accompanying the provisions of this bill. I do not wish to be understood as conceding the exaggerated arguments that have been made on this point, for I think they have been much exaggerated, but I think that in the course of time there may be some danger of developing under this plan an undesirable political control.

But what is the alternative? It seems to me that it is more important that the people of this country should be protected against the threat of the manipulation of credits in private and irresponsible hands, than that they should be protected against political danger. The government is always responsible. The people have the right to see what is going on while it is going on, and they have the ballot to correct whatever does go wrong. Let it be admitted that it will be necessary for the people to watch their servants and hold them to strict account. Eternal vigilance is still the price of liberty.

That may be admitted, and still we may say that we must have governmental control. Banking is a public utility. It is so recognized in the European countries, and it is coming to be so recognized in this country. It will not do for the bankers to keep on talking about being permitted to do what they will with their own. The property under their management is not all their own. The property belongs primarily to the depositors of the United States. Of course the bankers have the confidence of those depositors, for the public will not deposit

with a bank unless they have confidence in it; but they do not deposit merely because they have confidence in the bank; they deposit because they must deposit in order to have the facilities for business. It is a necessity, and it is a public utility in that sense. A few years ago we heard a great deal from those in control of the great life-insurance companies on this subject of being permitted to do what they would with their own; but their spirit has been very much chastened recently. The railroads and other public utilities are not allowed, without let or hindrance, to do what they will with their own, and their property is more their own than is the property controlled by the bankers. These public utilities have had restrictions put upon their right to do what they will with their own, and the time is coming when the bankers must come to see and expect this as necessary.

Again I say, there is going to be governmental control, and I sincerely hope that you gentlemen of the Academy of Political Science and you gentlemen of the Chamber of Commerce, even those of you who have your daily work in Wall Street, will recognize the necessity for such control, and will use your best efforts in coöperating to make that control wise and beneficial to the people of the United States.

BANKING REFORM IN THE UNITED STATES[1]

NELSON W. ALDRICH

Ex-Senator from Rhode Island, Chairman of the National Monetary Commission

ANY intelligent criticism of legislative proposals for banking and monetary reform must be based on a knowledge of existing conditions and of the present and prospective needs of the country, and a clear understanding of the defects to be cured and the evils to be avoided, as well as the nature of the remedies to be adopted. The magnitude of the interests to be affected favorably or unfavorably by suggested changes should lead us to exercise the greatest care in the formation of our judgments, and to see to it that we are not influenced in our opinions by local or other prejudices. Statistics are available to show the extent of the banking interests directly affected by monetary legislation, but we cannot possibly measure the magnitude of the interests which the American people of every community, of every section, have in the wisdom or unwisdom of suggested changes. The number of stockholders and depositors in, and borrowers from our banking institutions is greater than that of the adult population of the country. The people who have the deepest direct interest in the efficiency and good management of our financial institutions are the active business men throughout the country, whose enterprise has earned for the United States the first place in the world of industry and commerce. The people who will suffer most from injurious changes will be the wage earners and the great mass of people engaged in productive industries.

CHARACTER AND MAGNITUDE OF OUR BANKING SYSTEM

The current report of the comptroller of the currency shows that we have in the United States approximately 29,000 state and national banks (about 22,000 state and 7,000 national),

[1] An address at the dinner of the Academy of Political Science, October 15, 1913.

with resources in excess of 25,000 million of dollars. The rapid growth of our banking facilities in recent years is shown by increases from 1900 to 1912 in the number of institutions, from about 13,500 to 29,000; in banking resources from 10,785 million dollars to 24,986 millions; in loans and discounts from 5,657 millions to 13,953 millions; in individual deposits from 7,239 millions to 17,024 millions. The increase in population between 1900 and 1912 was twenty-two per cent, while the increase in banking resources was one hundred fifty-eight per cent. The wise management of these banks, for in the main the management has been wise, and the judicious use of these enormous banking resources have been perhaps the most important factors in promoting the growth and securing the unexampled prosperity of our agricultural, commercial, and industrial interests in recent years.

Every community in the United States, large or small, has one or more banks. The managers of these banks are men familiar with the wants of their customers and they are usually accepted as the financial advisers of their neighbors. In all matters affecting the prosperity of the neighborhood in which they are located their advice and judgment are often sought and usually followed. The intimate and important relations existing between banks and bankers and the people and communities should be carefully considered in any examination of the provisions of suggested legislation.

GENERAL CONDITIONS DEMAND REFORM

The exceptional record of the successful growth of our banking interests to which I have referred has been coincident with the unexampled prosperity of the country. We must not, however, lose sight of the fact that our great banking resources have been found in serious emergencies powerless to avert general disaster. Our banking system has broken down when subjected to any very severe strain. While there is nothing in present or prospective business conditions that should occasion alarm, we must remember that financial troubles often, in fact usually, come unheralded. Even the causes that produce them can never be definitely stated. It is evident that in the

near future the adequacy of our banking facilities is to be tested by new demands for credit in addition to our normal business requirements. In magnitude, the unusual demands here and abroad for additional credit and for the placing of new loans by states and industrial organizations have never been equaled. Demands of this nature, world-wide in extent, impose new and greater burdens upon the banking resources of the world. With the close business and financial relations which modern conditions have established between the great commercial nations, each country must bear some share of these new responsibilities. The need of the states of the near East for means to fund indebtedness contracted during the late conflict and to enable them to repair the ravages of war adds largely to the usual European demand.

In Europe, fear that grave political problems may not always be found capable of peaceful solution, and dread of the evil effects of an undue expansion of credit in any quarter, are disturbing elements. The high rates demanded for government and other loans, the impossibility of floating long-time loans at any rate, are evidences of unsettled and unsatisfactory conditions in the world's money market. In the United States our financial institutions will be called upon to meet insistent requirements of steam and electric railroads and industrial corporations for new loans to pay for necessary improvements and extensions, and to refund maturing obligations. Government and other large borrowers will be obliged to pay rates which a few years ago would have been considered extortionate. The effect of recent tariff legislation on business and government revenues is yet unknown. These conditions taken together naturally create a feeling of uncertainty in all financial centers. The enormous shrinkage, amounting to thousands of millions of dollars, which has recently taken place in the value of securities and property in the United States, furnishes evidence, whatever may be the cause, of a want of confidence in our continued prosperity on the scale of our past achievements.

These among other considerations should lead us to exercise the greatest care in the selection of remedies for admitted

defects in our banking system. The people of this great country, with all the momentous consequences involved, cannot afford to venture on untried experiments, or to adopt principles or methods that have been rejected by the teachings of universal experience. We cannot measure the direful results which might follow revolutionary changes. Any remedial legislation should be constructive and not destructive. We should seek to strengthen rather than weaken the efficiency of our credit organization. We should supplement rather than supplant a system which has grown to such enormous proportions under state and national laws, and to which the business of the country has with more or less satisfactory results become adjusted.

CHARACTER OF THE REFORM DEMANDED

To secure a wise and comprehensive reform of our banking and monetary system, we require:

1. An efficient banking organization by which bank suspensions and financial crises with their evil results can be avoided.

2. Means to secure a concentration of cash reserves of the banks and their mobilization for use whenever and wherever needed in times of trouble. In times of stress, scattered reserves of banks have been found useless for either defense or protection. The scramble of 25,000 banks in 1907, each to take care of its own interests and to increase its own cash reserves, contributed very largely to the panicky conditions which led to general disaster. Banks must be furnished with effective means for replenishing their reserves and increasing their loaning power at times when the need for credit expansion is imperative.

3. The general coöperation of banks must be secured to protect their own or the public interests when these are menaced and when individual or local efforts are ineffectual to prevent the paralysis of business and domestic exchanges.

4. An organization must be provided that can deal effectively with conditions which imperil the credit and status of the United States as one of the great financial powers of the

world. In times of threatened trouble or actual panic, the power to control the movements of gold and the course of foreign exchange through raising the rates of discount or otherwise is essential, from both a national and an international standpoint.

5. We must have an organization whose influence can be made effective by an advance in discount rates or otherwise in preventing an undue expansion or dangerous inflation of bank credits.

6. A currency should be provided that, in character and volume, in contraction as well as in expansion, will be responsive to normal or unusual demands. Seasonal or unusual demands for currency or credit for crop moving or other purposes have at times produced very unsatisfactory conditions in the money market owing to the inelastic and unscientific character of our monetary system.

7. A broad discount market must be created with recognized and legalized standards of commercial paper. Recent conditions also impose unnecessary burdens upon business and production, and hinder the natural development of certain sections of the country. These evil results are felt more keenly in new and undeveloped communities. The lack of such a discount market leads banks in all sections to send surplus money to New York to be loaned there on stock exchange securities.

The methods necessarily used in raising the enormous sums required for the production, movement and marketing of our agricultural and other products, are crude and unnecessarily expensive to producers. Notes and bills of exchange issued or drawn for agricultural, commercial, or industrial purposes, can be discounted only in a narrow, local market, and the result has been that our farmers and all others engaged in productive industries have been obliged to pay higher rates for their loans and have been placed at a great disadvantage in securing the credit which they have required and to which they are fairly entitled, for the growth, retention and distribution of their products. The adoption and use of proper standards for such commercial paper would enable our banks

profitably to replace in their portfolios speculative low-rate loans of all kinds with notes, bills of exchange and acceptances, based on the products and commodities of the country. If this change can be made, it will prevent the dangerous congestion which takes place at times in the great financial centres. It is difficult to understand, in this connection, why national banks, which are authorized by the House bill to accept drafts growing out of transactions involving importation or exportation of goods, are not permitted to accept domestic drafts of the same character. Why should a bank in Mississippi or Texas be permitted to accept the draft of a cotton planter on Liverpool, based on cotton shipments, when it could not accept the drafts of the same planter on a domestic consumer? Why should an importer in New York have better facilities than the western farmer who ships his grain to an eastern market?

EFFECTIVE REMEDIES SUGGESTED BY EUROPEAN EXPERIENCE

While there seems to be a general agreement as to the nature of the reforms demanded, unfortunately there is no such consensus of opinion as to the methods and machinery which should be employed in securing the desired results. This is to be regretted, as it seems certain from the experience of other nations that simple and effective remedies for defects are easily within our reach. While we have suffered greatly in almost every decade of our history from the evil effects of financial crises, the people of the great commercial countries of Europe have been entirely free for nearly half a century from disastrous losses arising from this cause. This exemption may be said to be due solely to the character and efficacy of their credit and banking organization. The experience of England and France, and later of Germany, in this respect, has led all the important commercial nations of the world except the United States to follow, in the essential features of their credit organization, in the footsteps of these great countries. The adoption within a few years by Sweden, Switzerland, and Japan of banking organizations along the lines of the countries I have referred to, completes the adher-

ence of the commercial world, outside of this country, to one general banking and monetary policy.

CRITICISM OF THE BILL

In considering the character of the remedies proposed by the bill which recently passed the House of Representatives I am not unmindful of the fact that it is much easier to criticize than to construct, and I certainly do not intend by any criticism I may make to increase the difficulties of legislators charged with serious responsibilities, but rather to call attention to changes which, it seems to me, must be made in the plan in the interest of wise and permanent legislation. The authors of the bill having in a majority of cases accepted remedies and adopted ideas based on experience of other countries, and on sound economic principles, it is all the more to be regretted that in some of the most important provisions of the bill the lessons of experience have been ignored.

My suggestions with reference to certain provisions of the bill are made with the hope that they may prove of service to those who have the bill in charge, in their difficult task of perfecting the measure. It is certainly desirable that the American people, whose highest interests are to be affected favorably or unfavorably by congressional action, should have as clear an understanding as possible of the nature of the proposals.

The two features of the bill which are open to the most serious objection are, first, the provisions which authorize the issue of government notes to be circulated as money and loaned on collateral security to the federal reserve banks created by the bill; second, the provisions which create a government board which can be accurately described as a government central bank of an objectionable type.

NOTE ISSUES

The proposals with reference to note issue are radical and revolutionary in their character and at variance with all the accepted canons of economic law.

It can hardly be necessary for me to recount in this presence the disastrous results which have inevitably followed the

issue of paper money by governments or states. I need only remind you of our own colonial and revolutionary experiences. That of France at the time of John Law and the French Revolution is equally significant. In exceptional cases, like our own experience with United States notes, where continuous depreciation has not ended in absolute worthlessness of issues, the losses arising from the use of a depreciated currency have greatly exceeded any possible financial benefits which have resulted from the violation of economic laws. Competent authorities estimate the greater cost of our civil war, owing to the use of depreciated currency, at more than five hundred millions of dollars.

In all cases of government issues, when the resulting expansion and inflation have brought about instability of conditions and values, those dependent upon wages and salaries and those engaged in agriculture and other production have been the principal sufferers, while the capitalists and speculators who could take advantage of constantly changing conditions have been the only classes who have been benefited. This condition has never been better characterized than by Daniel Webster, who said:

> Of all the contrivances for cheating the laboring classes of mankind, none is so effectual as that which deludes them with paper money. It is the most perfect expedient ever invented for fertilizing the rich man's fields by the sweat of the poor man's brow. Ordinary tyranny, oppression, excessive taxation, these bear lightly on the happiness of the community compared with fraudulent currencies and the robberies committed by depreciated paper. Our own history has recorded enough, and more than enough, of the demoralizing tendency, the injustice and intolerable oppression on the virtuous and well-disposed, of a degraded paper currency, authorized by law, or in any way countenanced by government.[1]

Pelatiah Webster, writing in 1781, after the total volume of Continental paper money had become worthless, said:

> We have suffered more from this than from any other cause or

[1] *Congressional Globe*, 27th Cong., 2d sess., app., p. 65.

calamity. It has killed more men, pervaded and corrupted the choicest interests of our country more, and done more injustice than even the arms and artifices of our enemies.[1]

Leading economists, financiers and statesmen of every shade of political belief have joined in the condemnation of the use of the obligations or notes of governments as a circulating medium. On this subject the views of Alexander Hamilton, who believed in a centralized national government, were fully concurred in by General Jackson and Mr. Benton and the leading statesmen who represented opposite views of government and of currency and banking questions.

Mr. Hamilton said in his report of 1790:

The emitting of paper money by the authority of government is wisely prohibited to the individual states by the national constitution, and the spirit of that prohibition ought not to be disregarded by the government of the United States. Though paper emissions, under a general authority, might have some advantages not applicable, and be free from some disadvantages which are applicable to the like emissions by the states, separately, yet they are of a nature so liable to abuse—and, it may even be affirmed, so certain of being abused—that the wisdom of the government will be shown, in never trusting itself with the use of so seducing and dangerous an experiment.

I will quote the views of General Jackson and Mr. Benton later.

Among American economists, the position and authority of Professor C. F. Dunbar will not be questioned. I know of no political economist of standing in this country who will not agree that the following statement of Professor Dunbar sets forth the sound economic doctrines that should control note issues:

The necessary conclusion from our experience with the legal tender notes plainly is that a government currency, under our conditions, is an unfit subject for national legislation. * * * * *

The often-repeated argument that a government issue, being a loan without interest, results in a saving to the treasury, which is

[1] Horace White, *Money and Banking*, 4th ed., p. 92.

lost when the right of circulation is delegated to banks is frequently resorted to. The experience of the United States presents a complete answer to this penny-wise reasoning. * * * The people of the United States have lost by shaken confidence, discouraged enterprise, and the actual ruin of thousands of citizens, resulting from the mismanagement of their currency, an amount beyond all comparison with the annual saving made by them at the treasury. * * *

Errors made in the past will be also made by the new men in the future; and the possibility that, in any moment of popular discouragement or passing delusion, some fresh experiment or abandonment of wholesome limitation may be resolved upon in haste, but with irreparable results, must continue to be a standing menace to our credit, public and private. * * *

Experience has shown that we can rely upon no principle or policy as a safeguard against the caprice or the temptation which at intervals must surely beset any legislative body having control of the direct issue of paper.[1]

Among British economists, Mr. H. D. MacLeod is perhaps the leading authority on banking and currency questions, and the view he expresses in the following quotation would be universally acquiesced in by foreign political economists. He says:

Governments and states should never issue paper money themselves. When states and governments once begin to issue paper money, they can never resist the temptation to issue it in boundless quantities, so that it soon begins to depreciate. They have no power to redeem it, and the depreciation is incurable.[2]

Citations of a similar character could readily be made from the opinions of all leading authorities, from the public utterances of statesmen, from the views of the representatives of all parties and of all classes.

Note issues in all commercial nations are made through banks of issue created by the government; all the conditions of issue, including those relating to character and amount, are

[1] C. F. Dunbar, *Economic Essays*, pp. 219, 225-7.

[2] H. D. MacLeod, *Theory of Credit*, v. 2, pt. 2, p. 1105.

fixed by government. This method of note issue finds universal approval in all enlightened countries.

In the thorough reëxamination of banking and monetary questions which has recently taken place in Germany, Switzerland and elsewhere, no representative of any party and no individual appeared to favor the substitution of government notes for bank issues.

It is true that in the period from 1814 to 1861, Congress authorized the issue of treasury notes in limited amounts, which were in every case issued as evidences of indebtedness on account of money borrowed to meet deficiencies in revenue or expenses growing out of wars. These treasury notes were receivable for public dues and were, with few exceptions, payable at a fixed time with interest, and were usually in denominations that precluded their use as currency.

The power given Congress by the constitution to borrow money clearly involved the right of issue of securities of such character and in such form as Congress might determine, and the right of the government to issue obligations of this nature was not seriously questioned in any quarter. Our own experience prior to the adoption of the constitution led the framers of that instrument expressly to forbid the states from emitting bills of credit, and the doctrine that the issue of notes of the government of the United States for circulation as money was not authorized by the constitution, found wide acceptance.

The opinion of Professor Woodrow Wilson was that generally held by statesmen of the period. In his history of the United States, he says:

> It (the constitution) absolutely forbade the state to issue bills of credit, did not give the federal government power to do so, and was meant practically to prohibit the use of any currency which was not at least based directly upon gold and silver.[1]

The first issues of United States notes with full legal-tender qualities and intended to circulate as money were made during the civil war and grew out of the urgent necessities of the gov-

[1] Woodrow Wilson, *History of the American People*, v. 4, p. 46.

ernment at that time. The plea of necessity was the only justification urged for this radical departure from the policies and doctrines of the founders of the republic. Excessive issues of these notes and the repeal of the right to exchange the notes for interest-bearing obligations of the United States produced the usual result of depreciation and discredit.

The reasons for the general condemnation of government note issues are not difficult to understand. No government has yet been found strong enough to resist the pressure for enlarged issues in times of real or imaginary stress, or to meet some real or fancied exigency in its own affairs or a popular demand for more money. Issues have been at first limited in amount and surrounded by proper safeguards as to exchangeability and convertibility, and by what seemed to be ample provisions for ultimate safety, but experience has shown that in every case in response to a popular demand these safeguards have been one after another ignored or removed, restrictions as to amounts of issue have been modified or repealed, and the exhilaration which has followed the initial issues has led to an irresistible demand for continuous inflation, and this has been followed by progressive depreciation, a necessary destruction of value, and general bankruptcy.

Some of the friends of the House bill who do not like to be classed as advocates of the further issue of government notes assert that the notes to be issued are after all notes of the reserve banks and that the United States occupies the same relation to them that it does to national bank notes.

The differences are, of course, perfectly obvious and fundamental. The notes to be issued by the House bill are by its express terms "obligations of the United States" issued for the purpose of "making advances to federal reserve banks," the banks to furnish "collateral" and to pay "interest" on the loans. National bank notes are in terms and in fact obligations of the national banks. The treasury under the banking law redeems national bank notes for the national banks and takes as security for any failure of the banks to respond in payment of advances United States bonds equal in amount to the total amount of bank-note issues with right to sell at

any time at public or private sale without notice. In the one case we have obligations of the United States issued by a government agent and loaned to reserve banks. In the other case we have obligations of the national banks with a pledge of Government bonds to secure their final redemption by the banks.

EXPERIENCE OF FRANCE

In this connection the experience of France in 1790 and the years following with the issue of assignats furnishes valuable lessons. France had confiscated the real property of the French church, which consisted of valuable estates in town and country forming about one-third of the real property of France and having a value of about 4,000 millions of francs and yielding a yearly income of about 200 millions. The first issue of notes made in 1790 was limited to 400 millions of francs, and was based upon a specific pledge of this vast property. The holders of the notes had a right to exchange them for the property pledged at perfectly satisfactory prices. The arguments that were used in support of this issue have a familiar sound. It was contended:

> Paper money under a despotism is dangerous; it favors corruption; but in a nation constitutionally governed, which itself takes care of the emission of its notes, which determines their number and use, that danger no longer exists.[1]

It was claimed that paper so limited and so secured was as good as gold and that, as it could not be issued in excess, there was no possibility of depreciation. Great stress was placed upon the fact that entirely different conditions existed in Law's time, and that with a free government and new conditions only beneficial results could follow; that prosperity and abundance were assured. A scientific, practical guarantee of goodness was asserted and in an address issued by the French Assembly it was said that the paper had no " value derived from the national authority, but a value real and immutable; a value which permits it to sustain advantageously a competi-

[1] A. D. White, *Fiat Money in France*, p. 4.

tion with the precious metals themselves." In the later discussions it was asserted that the precious metals would soon be used only in the arts, and a currency of paper, secured upon the first and most real of all property, would take its place. A demand was made later for an issue sufficient in amount to pay the government debt.

No paper currency ever had what seemed to be a more practical guarantee for its security and value. It was based upon what was then and is now the highest form of security, a mortgage on productive real estate of unquestioned value. The notes bore interest at the rate of three per cent per annum and this, it was claimed, would insure their retirement when not needed. Within the next six years 36 billions of assignats and 2,500 millions of mandats had been issued, and then the collapse came, and the whole issue was worthless and repudiated. Conditions at the end of this period are thus described by a historian of the French Revolution:

> Before the end of the year 1795 the paper money was almost exclusively in the hands of the working classes, employes and men of small means, whose property was not large enough to invest in stores of goods or national lands. The financiers and men of large means, though they suffered terribly, were shrewd enough to put much of their property into objects of permanent value. The working classes had no such foresight, or skill, or means. On them finally came the great crushing weight of the loss.[1]

AMOUNT OF ISSUE

I believe it will be found that there is no substantial limitation upon the amount of notes that can be issued under the House bill except in the requirements for reserve. It is claimed that the issue is limited to the amount applied for by the reserve banks, and that the aggregate amount of applications is limited by the amount of paper in the possession of the banks, and further that the central board has the discretionary power of declining applications. It is impossible to say what if any restraining effect on the volume of note

[1] Von Sybel, *History of the Revolution*, v. iv, pp. 337-8.

issues these provisions would have. The demand for currency in increasing amounts, under ordinary circumstances, as shown by our experience and that of other countries, is insatiable.

Selfishness is naturally a controlling factor in business corporations. We may be certain if the loan is a profitable one for the bank, applications will be made and insisted upon. If a reserve bank could hire money at ½ per cent or 1 per cent and loan two-thirds of it to its customers at 4 per cent, 5 per cent, or 6 per cent, the business would certainly be a profitable one, and so long as the notes could be kept in circulation the amount of loans and note issues could be indefinitely increased. The power of the reserve banks to buy in the open market from private parties commercial paper and bills of exchange of individuals, firms, and corporations, and to pay for their purchases in government notes and to furnish the central board with security for the notes by a deposit of the paper purchased, provides another method of profitable note inflation.

It is certain that the central board would find it difficult to resist importunate demands made on behalf of communities or the public. There is no limitation in the bill of the amount of commercial paper that a reserve bank may rediscount or purchase. The amount of the loans and discounts of all the banks of the United States is about fifteen thousand million dollars and the amount of securities held by banks about five thousand millions more. The House committee fixes the amount that would be available for rediscount by the reserve banks at about six thousand millions. In my opinion this amount is likely to be largely increased by the exercise of the authority given the central board to fix the character of the loans available for rediscount.

It is, of course, problematical what portion of this vast amount could, by an insistent demand for money, or by a desire on the part of the reserve banks to increase their profits, be made avaliable as security for loans of notes from the central board. If notes should be issued in place of national bank notes this would add seven hundred millions to any amount otherwise required. The report of the committee

states that it is intended that the government notes shall take the place of national bank notes, but the bill is silent upon the subject. The commercial paper pledged by a reserve bank as the security for loans of notes is delivered to the chairman of their own board of directors and kept in his custody in a vault on their own premises. As the notes fall due, or a change is necessary for other reasons, a substitution takes place under the direction of the custodian, and, as long as the necessary amount is kept intact, the loan may go on indefinitely. It should be remembered in this connection that, by the various provisions for redemption, the notes issued to any reserve bank are returned to it by other reserve banks and by the treasury, but that there is nothing to prevent their retention and reissue by the receiving bank, and for this no new application is necessary, and the transaction can be repeated.

We may expect that the notes will become a permanent addition to the currency of the country, as currency of this character, once issued, by the operation of the Gresham law, will not be retired, and its amount will constantly increase. There will be no inducement to retire it. Each one of the federal reserve banks, by the provisions of the bill, is forbidden to pay out the notes of any other federal reserve bank, the purpose being, I suppose, to attempt to secure their prompt redemption. But this provision would not be effective, as no such prohibition applies to the twenty-five thousand other banks in the country, or to the business men and people in whose possession the notes would be found.

With extended use of the new notes, another form of currency would be added to the seven already in existence, and if the provisions in regard to the use of letters and serial numbers to distinguish notes which are to be ultimately redeemed by particular banks should give a greater value to some notes than others, as might be the case if the proposed earmarking is successful, we should have twelve additional forms of currency.

REDEMPTION OF GOVERNMENT NOTES

The method provided by the bill for the redemption of government notes is unsatisfactory. All notes are redeemable on demand at the treasury of the United States or at any of the federal reserve banks in gold or lawful money. The banks are required to deposit with the agent of the Federal Reserve Board, with their application for notes, commercial paper and bills of exchange equal in amount to the notes applied for. Whenever any of the notes received by a federal reserve bank shall be paid out, the bank is required to segregate from its reserves, held against outstanding obligations, an amount in gold or lawful money which shall be equal to 33⅓% of the amount which is held for the redemption of the notes. The notes issued to any federal reserve bank are made a first lien upon all the assets of such bank.

These provisions, if effective in ordinary times when there is no call for redemption of the notes, would, I believe, fail in times of trouble. Take a condition of affairs like that in 1907 when so many of the banks of the country suspended payment. At such a time the collateral could not be used for redemption purposes and the lien upon assets could not be enforced. The inadequate means of redemption by the reserve banks would fail to insure immediate convertibility and the treasury might be obliged to assume the entire burden. But the treasury would have no gold or other lawful money in its possession available to meet this demand, except a 5% fund. The general fund of the treasury, which includes its gold coin and bullion, would be deposited in the suspended banks, and there would be no alternative but government discredit and repudiation of its obligations.

It is the purpose of the bill to consolidate reserves so that they could be made useful at any time, but in the case of reserves for note issues these would be scattered at twelve different points. Even if the reserves were consolidated and held in a manner that would permit their use they would still be found inadequate, judging by the experience of other countries.

The percentages of the average cash holdings of the three great European banks for the ten years 1901-10 to note issues and all demand liabilities were as follows:

	England	France	Germany
To note issues	86.6	84.5	72.5
To all liabilities	47.4	72.9	50.4

Convertibility of note issues should be insured by adequate cash reserves, and these should be so placed and held that they would be at all times available for redemption purposes.

It is difficult to understand why the proposition to make these new notes redeemable in lawful money, that is, in other obligations of the United States, was incorporated in the bill. Bank notes, the obligations of banks, are necessarily redeemable in lawful money, that is, in any form of money which is made legal tender by the government, but the same rule should certainly not be applied to government obligations. In colonial times it was quite common, when one issue of notes had become practically valueless, to authorize their redemption on some basis in new notes, and this process went on continuously until the final collapse of all issues.

In considering the adequacy of the reserves proposed for the redemption of the new notes I have not overlooked the fact that a provision is inserted which gives the central board the right to require the reserve banks to deposit in the treasury for redemption purposes a fund equal to 5% of the outstanding notes. There is a similar provision in the national banking law which requires a 5% fund to be deposited in the treasury, but this fund has been found for years to be entirely inadequate to meet the demands upon the treasury for redemption of the national bank notes. The Secretary of the Treasury, in his last report, makes this statement:

> Redemptions of national bank notes during the year have been constantly in excess of the 5% redemption fund required under section 3 of the Act of June 20, 1874, to be kept by the banks on deposit in the treasury of the United States for the redemption of their notes. Consequently, that fund has been overdrawn during the whole year and the treasury has had to advance payment

for notes as they are presented out of the general fund. The largest overdraft was $26,900,000 on February 3, 1912.

These serious overdrafts are still going on, and in some conditions of the treasury they might cause serious embarrassment to the government. On October 1 this account was actually overdrawn $21,760,000.

If there is to be any redemption fund held in the treasury it should be not only adequate in amount to meet ordinary demands but sufficient for all emergencies. The redemption fund provided in this bill, as well as the redemption fund for national bank notes, should be substantially increased.

EACH RESERVE BANK RESPONSIBLE FOR REDEMPTION OF TOTAL ISSUE

Each of the federal reserve banks, notwithstanding an attempt is made to make it responsible only for notes issued to it, would be practically, and it might be actually responsible for the redemption of the total issue, as, so far as the public is concerned, all notes without distinction as to whom they are issued, are entitled to redemption at any one of the reserve banks as well as at the treasury. For instance, if a thousand millions were issued, any one of the banks would be required to redeem the whole or any part of this on demand, and this would apply to a federal reserve bank to which no notes had been issued by the board. It must be, I think, apparent, that with any considerable amount of notes outstanding, with reserves for redemption scattered in twelve different banks, any of the reserve banks or the treasury of the United States would be likely to find itself in a position where it would be unable to meet its obligations in gold or lawful money. If two hundred million dollars in these notes should be sent to the South or West for crop-moving purposes, one or two reserve banks with $5,000,000 capital might in time of trouble be called upon to redeem in gold or lawful money notes greatly in excess of their reserves or resources.

The redemption in specie of the United States notes which were issued during the war was possible only after the accumulation of one hundred millions of gold coin procured by the

sale of government bonds, and the continuous redemption is assured by the one hundred and fifty millions of gold now held in the treasury as a trust fund. We now have a proposition to issue an unknown amount of United States notes without any government reserves of any kind.

NO SECURITY AGAINST FRAUDULENT ISSUES

Heretofore in legislation looking to the regulation of currency or to the issue of government obligations, Congress has surrounded its authorization with every possible precaution against fraud. Issues of currency are made through the appropriate bureau of the Treasury Department, and their character and denominations are fixed by the Congress itself. In the case of the pending bill, the Federal Reserve Board is authorized to issue obligations of the United States, and to fix their character, form and tenor. The transfer of this important function of government to a board whose acts are not subject to the supervision of any department of the government, with requirement for but one annual report, with no requirement for publicity of transactions, and with no power on the part of any representative of the government to detect or punish a flagrant abuse of power, has no precedent in the history of this or any other country.

If the board should prefer to substitute the notes which it has authority to issue for other forms of currency to give them a wider circulation, it might easily do so, by providing for the issue of the new notes in small denominations of ones, twos and fives, and thus drive out of circulation and into the treasury and the banks, silver certificates and United States notes of equivalent denominations, and give this important field permanently to this new form of government currency.

RECORD OF THE DEMOCRATIC PARTY ON GOVERNMENT NOTE ISSUES

The reasons given to justify the extreme pressure which is being brought upon Congress to enact the administration bill is that its adoption is necessary in fulfilment of promises made by the dominant party. The statement would seem to justify us in an examination of the record of the party to ascer-

tain when and under what circumstances these promises were made. Prior to the civil war no great leader of the Democratic party advocated the issue of government notes to be used as money, as proposed in this bill. After the panic of 1873, the efforts of the friends of sound money to secure the resumption of specie payments and their insistence that the public credit could be sustained only by the payment of all government obligations according to their tenor in standard coin, led to the formation of a party which was opposed to resumption and demanded the payment of government bonds in a depreciated currency and declared for the first time in favor of the issue of United States notes as a substitute for national bank notes. These opponents of resumption and the friends of further inflation and of the free coinage of silver included members of both political parties, but they were not strong enough in the early stages to induce either of the great parties openly to espouse their cause in national platforms.

The greenback sentiment was strong enough to secure the passage of an act in 1875 increasing the limit of United States notes in circulation. The veto of this measure by General Grant was an effective check to the first and only post-bellum attempt prior to 1913 to secure an increased use of government money. The Democratic platform of 1872 contained an emphatic declaration in favor of a return to specie payments and a maintenance of the public credit, and denounced repudiation in every form and guise. The failure of the friends of inflation to secure the formal support of either of the great parties to their peculiar views led to the formation successively of the Greenback, People's and Populist parties.

The first declaration in the national platform of any party in this country in favor of a further issue of United States notes was made by the Greenback convention of 1876, which declared for a United States note issue directly by the government, and convertible on demand into United States obligations.

In 1875 the Democrats of Ohio demanded that the policy of contraction should be abandoned, that the resumption law should be repealed, and that the volume of currency and

United States notes should be made and kept equal to the wants of trade, and that these notes should be substituted for national bank notes. The notable campaign in Ohio in this year between William Allen and Hayes resulted in the defeat of Allen. In the following national campaign the Democrats repudiated the Ohio idea and nominated Mr. Tilden for President on a platform which declared that reform was necessary to establish a sound currency, restore the public credit, and maintain the national honor.

The Democrats in their platform of 1880 reaffirmed the declaration of 1876 and declared for honest money and strict maintenance of public faith. The Greenback platform of that year declared that all money, whether metallic or paper, should be issued and its volume controlled by the government and not through or by banking corporations.

The Democratic convention of 1884, which nominated Mr. Cleveland for President, declared in favor of honest money and the gold and silver coinage of the constitution. The Democratic convention of 1888 renominated Mr. Cleveland and reënacted the provisions of the platform of 1884. The Democratic platform of 1892 demanded the repeal of the Sherman act of 1890, and demanded that all paper currency should be kept at par and redeemable in coin, "a policy made specially necessary for the protection of the farmers and laboring classes, the first and most defenseless victims of unstable money and a fluctuating currency."

The attitude of leading Democratic statesmen at that time is shown by the statement of President Cleveland in his message of August, 1893:

> The people of the United States are entitled to a sound and stable currency and to money recognized as such on every exchange and in every market of the world. Their government has no right to injure them by financial experiments opposed to the policy and practise of other civilized states, nor is it justified in permitting an exaggerated and unreasonable reliance on our national strength and ability to jeopardize the soundness of the people's money.

Similar expressions representing the views of leading repre-

sentatives and statesmen of the party of the period could be readily cited.

The Democrats, in the national convention of 1896, which nominated Mr. Bryan for the presidency, announced for the first time their adherence to the doctrines enunciated by the Greenback, Populist, and Farmers' Alliance conventions in previous years. Mr. Bryan received the nomination of the Democrats, the Populists, and the Silver party on practically identical platforms. As the advent of Mr. Bryan as the Democratic nominee marked a new era in the history of the Democratic party, and as it was led under his leadership to abandon its traditional principles, it is interesting to examine in detail the proposals of this new political combination. The Democratic platform declared:

> Congress alone has the power to coin and issue money, and President Jackson declared that this power could not be delegated to corporations or individuals. We therefore denounce the issuance of notes intended to circulate as money by national banks as in derogation of the constitution, and we demand that all paper which is made a legal tender for public and private debts, or which is receivable for dues to the United States, shall be issued by the government of the United States, and shall be redeemable in coin.

The platform in this form was reported by a majority of the platform committee, and after a long discussion was adopted by a vote of 628 to 301. The minority members of the platform committee, consisting of the representatives of sixteen states, which included such well-known Democrats as David B. Hill, of New York, William F. Vilas, of Wisconsin, Judge George Gray, of Delaware, Lynde Harrison, of Connecticut, and John E. Russell, of Massachusetts, declared that the Democratic party is a party of hard money and is opposed to legal-tender paper money as a part of our permanent financial system. They further declared, "We therefore favor the gradual retirement and cancellation of United States notes and treasury notes under such legislative provisions as will prevent undue contraction."

The bolting Democratic convention which nominated John

M. Palmer, of Illinois, for President, declared for such intelligent currency reform as will confine the government to its legitimate functions, completely separated from the banking business, and afford to all sections of our country uniform, safe and elastic bank currency under governmental supervision, measured in volume by the needs of business.

The Democratic platform of 1900, when Mr. Bryan was again a candidate, reënacted the currency provisions of the platform of 1896, and demanded the retirement of national bank notes as fast as government paper and silver certificates could be substituted for them.

In the Democratic convention of 1904, which nominated Judge Parker for President, there was a notable contest in the platform committee which resulted in an agreement that the platform should remain silent on all monetary questions, on the theory that these questions had been settled by legislation and events, and that there were no monetary questions at issue in the campaign. This agreement was concurred in by Mr. Bryan, but Judge Parker's telegram to a member of the convention, saying that he regarded the gold standard as affirmatively and irrevocably established, led to a prolonged discussion in which Mr. Bryan took an active part, but his ideas with reference to the government issue of notes were not adopted.

The Democratic platform of 1908, when Mr. Bryan was again a candidate, in addition to a pledge to secure legislation for a guarantee of deposits, declared, " We believe that, in so far as the needs of commerce require an emergency currency, such currency should be issued, controlled by the federal government and loaned, on adequate security, to national and state banks." The Democratic platform of 1912 was silent upon the question of government note issue.

DOCTRINE OF THE BILL

The theory that the United States should issue currency in the form of its promises to pay is a populistic doctrine. It had no standing as a Democratic party principle until the advent of Mr. Bryan as the nominee for the presidency in 1896.

It was injected by Mr. Bryan into the party platform in spite of the protests and against the votes of the men who had been most prominent in the party councils, men who advocated loyalty to the policies and principles to which the party had adhered throughout its existence. This greenback doctrine has never received the approval of the American people at the polls and there is every reason to suppose that it would to-day meet with their positive condemnation if the question could be submitted to a vote in a national election. It is not too much to say that the proposals in the bill came to the country as an absolute surprise. There had been no suggestion that an attempt was to be made to revive the greenback heresy or to adopt in legislation the rejected theories of the Populist party. The Democratic candidate for the presidency was silent upon the subject during the last campaign and he has not, so far as I am aware, up to this time, publicly expressed his approval of Mr. Bryan's ideas with reference to note issue. The large majority of the American people who favor sound money believed that the question of further greenback issues was settled permanently by the elections of 1896 and the following years. If the House bill should be enacted into a law, Mr. Bryan will have achieved the purpose for which he has been contending for a decade. It would be difficult to find in history an occasion where a political dogma which had never found a permanent place in the tenets of the dominant party and which had been rejected by unanimous verdict of the civilized world could be successfully injected into a great legislative measure as a price for the support of a faction. It is not surprising that Mr. Bryan should consider the insertion of his peculiar views into the measure we are considering as of transcendent importance. His views upon this subject throw such an important side-light upon this feature of the bill and the reasons for its incorporation that it seems to me desirable to quote them in full. In a recent letter to a member of the banking and currency committee of the House of Representatives, he makes the following statement:

The provision in regard to the government issue of notes to be issued by the banks is the first triumph of the people in connection with currency legislation in a generation. It is hard to overestimate the value of this feature of the bill.

In the second place, the bill provides for government control of the issue of this money—that is, control through a board composed of government officials selected by the President with the approval of the Senate. This is another distinct triumph for the people, one without which the government issue of money would be largely a barren victory.

The third provision of the bill, which I regard as of first importance, is the one permitting state banks to share with national banks the advantages of the currency system proposed.

These three provisions are, to my mind, of such transcendent importance that I am relatively very little concerned as to the details of the bill.

The letter was written to a member of the House upon the eve of the democratic caucus called to act upon the bill and amendments. While this frank and courageous declaration of Mr. Bryan's had the expected result of solidifying his followers in the support of the bill, it also, I venture to hope, opened the eyes of that numerous portion of the American public which is not and never has been in sympathy with his opinions on this subject, to the dangerous character of the proposals he commends so warmly.

The Bryan proposition as now made and accepted furnishes a plan of distribution of notes that is skilfully devised. The printing of the notes is a simple matter, but no advocate of greenback theories has heretofore been able to suggest any practical way by which they could be put into circulation. Mr. Bryan himself has not always been clear upon this point. In a speech made by him in 1894 he says:

If it is said that we must institute banks of issue in order to put money into circulation, I answer that there is a better way. The issue of money by the government directly to the people gives a safer money and saves to the people as a whole the profit arising from its issue. When a bank issues money you must pay the market rate of interest in order to get it, but when the government issues money

the people save the interest, if the money is afterward called in, and they save the principal also if the money is kept in circulation. Numerous plans have been suggested for putting this money into circulation. Some have an idea that a government issue can only be put forth by loaning it to the people, either directly or through the agency of banks.

There are, in my judgment, other and better ways. If a limited amount is issued, and of course the amount must be strictly limited, and it is loaned to the people, partiality will be shown in its distribution, for only a few, relatively speaking, can be accommodated.

But aside from the danger of placing so great a power in the hands of the dominant party, there are plans more just and equitable than that of loaning. The money can be used to pay the expenses of the government, as the greenbacks now in circulation were used to pay the expenses of the war. If Congress decides to increase the currency a certain amount annually, say for illustration, fifty millions a year, it can reduce the tax levy to that extent and the people will receive the benefit of the issue just in proportion as they pay taxes, for they will save to that extent the taxes which they would otherwise pay.

Aside from its announcement of general principle there are two points in this quotation that are worthy of attention. He says that the amount must of course be strictly limited, and calls attention to the danger of placing so great a power, that is, the power to loan money, in the hands of a dominant party. It would seem that Mr. Bryan's ideas upon the subject are progressive. He certainly could not have anticipated in 1894 that it would be possible for him to secure the adoption of a plan of distribution much more comprehensive in its character than he at that time thought wise to advocate. Mr. Bryan, in his letter to which I have referred, reiterates with increasing emphasis the statement that a government issue of notes through a board of government officials is a distinct triumph for the people. If the method of distribution by loaning notes to a class of banks is a triumph for the people, why not make the triumph more definite and beneficial by loans on similar terms to all banks, or to all individuals or corporations doing business, or, better still, directly to all the people? If the proposals for note issues contained in the

bill are really in the interest of the people, why not make them comprehensive and include all the people rather than a certain privileged class? Why not give the people the profits of issue rather than confer them on undeserving middlemen? If the United States is to engage in the business of loaning its obligations on collateral, then logically the demand for the loaning of government money on warehouse receipts issued on deposits of cotton and grain cannot be resisted.

It is not surprising that Mr. Bryan and his followers should be but little concerned as to the other details of the bill. I have no disposition to detract from the credit to which Mr. Bryan is entitled for the victory he has attained, but I think we have a right to ask that the American people should be given an opportunity, under the circumstances, for a full hearing upon the question before final judgment is rendered adverse to their highest interests.

The incorporation of the provisions for government note issues in the administration bill is certainly a great personal triumph for Mr. Bryan, but it is, at the same time, an emphatic condemnation of the theories of government and the economic teachings of every great Democratic leader from Andrew Jackson and Thomas H. Benton to Samuel J. Tilden and Grover Cleveland. It is undoubtedly true that the support of Mr. Bryan and his followers was necessary to secure any legislation upon this subject, but it is unfortunate that to secure this support it seemed to be necessary to sacrifice the cherished principles and traditions of a great party.

The ascription by Mr. Bryan of transcendent importance to the issue of government notes by a government board, taken together with the propositions which have been offered by two leading members of the Senate committee, to issue United States notes in place of gold certificates, national bank notes, and government bonds, indicate that the bill as it now stands is but the first step in a revolutionary program. The bills I refer to contemplate the issue of two dollars of United States notes to take the place of one dollar of gold certificates which are to be retired, the gold retained in the treasury to be used as a reserve for the new notes issued on a fifty-per-cent

basis. The gold upon which gold certificates have been issued is held as a trust fund by the United States under a solemn pledge made in the act of 1900 that it shall not be used for any other purpose. The exchange suggested, if carried to its conclusion, would result in unbounded inflation.

The policy of issuing gold certificates based on a deposit of gold was adopted deliberately and with wisdom as a means of providing a currency absolutely safe under all circumstances, and was designed to encourage the use of gold through its representatives. To abandon this policy and use the gold through manipulation of notes for other purposes, not only would involve the good faith of the government, but would be extremely dangerous from the point of view of the public interest. The fact that proposals of this kind have been made by responsible legislators points the way which is sure to be followed if we once enter upon the policy of government note issue.

THE TYLER PLAN

In the proposals to create a Federal Reserve Board and to provide for the issue of government notes, the authors of the House bill followed a plan submitted by President Tyler to Congress in 1841 for the creation of an Exchequer Board. It is quite natural, perhaps, that Virginians should follow a Virginian President in the preparation of a plan but the selection made is a matter of surprise. President Tyler, after having vetoed, on constitutional grounds, a bill to establish a fiscal bank and another to create a fiscal agency, in his annual message suggested a plan to establish a Board of Control. This he described as a plan which rests on powers acknowledged in practise to exist from the origin of the government, which will at the same time furnish the country a sound paper medium, and afford all reasonable facility for regulating the exchanges. Following this suggestion, Secretary Forward submitted to Congress, December 21, 1841, a plan for the creation of an Exchequer Board, the designation having been changed from a Board of Control. The Exchequer Board was to be composed of the Secretary of the Treasury for the time being, the treasurer of the United States for the time

being, and three commissioners to be appointed by the President, with the advice and consent of the Senate, one of the commissioners to be appointed for two years, one for four years, and one for six years, and vacancies subsequently occurring to be filled at the end of every period of two years. The board was authorized and directed to cause to be prepared and issued treasury notes of a denomination of not less than five dollars or more than one thousand dollars which were to circulate as money. These notes were redeemable in gold or silver on demand. The amount of the notes was limited to fifteen millions of dollars unless otherwise provided by law. They were made receivable for all dues to the United States and it was provided that the central board and all of its several agencies should keep on hand at all times a gold and silver reserve which should equal one-third of the amount of outstanding notes. The board was also authorized to establish agencies for the transaction of its business in different parts of the country, and to purchase and sell domestic bills of exchange payable in another state from that in which they were drawn. The purpose of this provision, it was claimed, was to facilitate domestic exchanges, which for some time had been in a most demoralized condition, being dependent upon state banks in different parts of the country, most of whom had suspended specie payments and whose notes were at a large discount. You will notice the wonderful resemblance between the two plans—the same kind of a board with the same power over the currency, except that the amount of the notes to be issued was limited to fifteen millions of dollars in the Tyler plan; but, with the same proportion of reserves, the redemption power was to be in gold and silver alone. None of the enormous powers granted the Federal Reserve Board to loan money and control the banking system of the country are, however, to be found in the Tyler plan. This plan was presented to Congress at the beginning of the December session in 1841. It was discussed at some length in both houses and finally referred to friendly committees in each house. The terms of this original plan, the character of the men who discussed its provisions, and the

final disposition of the measure, all have the strongest possible interest for us in the consideration of the Democratic caucus bill. The senators who took the leading part in the discussion in the Senate were James Buchanan, Thomas H. Benton, John C. Calhoun, Levi Woodbury and Robert J. Walker, men whose right to speak for their party and its policies were not then doubted and cannot now be called in question by the friends of the enlarged Tyler plan which we are now considering. It was apparent upon the presentation of President Tyler's plan that it had few friends or even apologists in either house. The principal discussion occurred before the reference of the bill to the committees.

In the Senate, Senators Buchanan and Benton led the opposition to the measure. I feel justified in quoting from the debate at length on account of its illuminating qualities. Senator Buchanan, in his speech of December 29, 1841, as reported in the Congressional Globe, said that

> he had viewed the plan submitted by the Secretary in every aspect and he could see nothing in it but a great government bank. They (the Exchequer Board) were to put in circulation a government paper currency not exceeding $15,000,000 in notes of a denomination not lower than five nor higher than one thousand dollars and they were expressly authorized, according to the rules of banking, to issue three paper dollars for every gold and silver dollar in their possession. Then it was a bank of issue. Was it also a bank of discount? Could any man doubt it? * * * Mr. Buchanan therefore took it for granted that it could not and would not be denied that this Exchequer Board was a bank. * * * How could it possibly be supposed that any honorable senator belonging to the party with which it was Mr. Buchanan's happiness to act could ever adopt a plan of this description? * * * What would the President become, according to this plan? He was already the great fountain of political patronage; and he was to become the head of an immense moneyed institution. Protesting always that no remarks he should now make had the remotest application to President Tyler, he put the case of an ambitious and dangerous man being at the head of the government—an Aaron Burr being in the chair—and let him have it in his power to control the whole of the public revenue; let him have at his disposal all the

money of the people, with which to purchase the services of political partisans on the eve of a great presidential election, and what would become of the national liberty? All they had formerly heard about a union of the purse and the sword was mere idle declamation; but here was that union in reality, and without a veil. All the money of the people was to be subjected to the executive disposal, and the President was to become at once the fountain of individual wealth as well as of political power. The treasury bank was to be completely and exclusively under the control of the government; and an able, who should be at the same time a bad man, would be in circumstances, by the use of this double power, both political and fiscal, to spread unbounded corruption throughout the community, to subsidize the venal to the purposes of his ambition, and so to corrupt and to impair the liberties of his country, that they would be no longer worth preserving. * * * * * *

These exchequer notes constituted in every respect a government paper money, and what had the past history of the world invariably demonstrated to be the fate of such money? Was there one country under the sun which ever had tried it and had not been a sufferer from the experiment? Everywhere its value had depreciated from day to day, until at length it had sunk to nothing. The two most striking examples of this were to be seen in the assignats issued during the French revolution, and the continental money of our own Revolutionary days. In both cases, indeed, the paper accomplished a glorious purpose—it established and sustained public liberty, and enabled each of these nations to resist and overcome a despotic power; but as a currency, as money, it sank and sank until at length it lost all value. And should we, in these piping times of peace, when the people were abundantly able to pay all the expenses of government, resort to an expedient suited only to the most desperate emergency, and of so tempting and seducing a character as to have been abused by every government that had resorted to it? [1]

The part which Mr. Benton took in the discussion was even more important and significant. He said:

In his (Hamilton's) report on a national bank in 1791, he ran a parallel between the dangers of bank paper and government paper, assigning to the latter the character of far greater danger and mischief—an opinion in which I fully concur with him.[2]

[1] *Congressional Globe*, 27th Cong., 2d sess., app., pp. 43-4. [2] *Ibid.*, p. 65.

After quoting the report he says:

I can add nothing to the force of these sentiments by adding my own concurrence in them. I fully concur in the sentiment that government issues of paper are far more dangerous than bank issues—as much more so as the power and sphere of action of a government is greater than the power and sphere of action of a bank. * * * The point of difference between them is a government bank and government paper on one hand, and a banking company under a national charter, issuing bank notes, on the other. This is the point of difference, and it is a large one, very visible to my eye; and I am free to say that, with all my objections to the national bank and its paper, I am far more opposed to government banking, and to government issues of paper money.[1]

And again:

A great number of our American people * * * * * have become possessed of a fixed idea that paper money is the *summum bonum* of human life. Possessed of this idea they direct all their thoughts to the erection of a national institution—no matter what —to strike paper money, and circulate it upon the faith of the credit and revenues of the union. No argument, no reason, no experience of our own, can have the least effect in dislodging that fixed and sovereign conception. To this we are indebted for the cabinet plan of the federal exchequer and its appurtenances, which has been sent down to us.[2]

Senator Calhoun, in the course of his speech, said:

There were many and decisive objections to the scheme proposed. They had been clearly and strongly pointed out by the senator from Pennsylvania (Mr. Buchanan). He agreed with him that it would be a government bank, not only in effect, but in reality. * * * * * * He also concurred with the senator that it would, at no long interval, become a mere machine for issuing irredeemable paper. The report, itself, among its admissions, states that there is an almost irrepressible tendency on the part of banks to excess in their operations. It is true, but not the less so, that there is the same

[1] *Congressional Globe,* 27th Cong., 2d sess., App., p. 66.

[2] T. H. Benton, *Thirty Years View,* p. 392.

tendency in all paper circulations; and, if possible, stronger in most of its forms than that of the banks themselves.[1]

Senator Woodbury said in debate:—

When what is called money rests for its character on naked legislation or inadequate means in specie to redeem every dollar of the paper due, affairs might, to be sure, go on confidingly while no deficiencies were threatened, no extravagant expenses incurred, or no great fallings-off in resources apprehended. * * * Let a scheme like this be tested by such panics and over-trading as have characterized the few years past—and the whole would explode in a single month.

All the evils of old Continental money and French assignats, and all the ravages inflicted by colonial paper, before the Revolution, would be probable, if not inevitable. * * * * In such a panic as that in 1834, or 1837, or 1840,—and many more which might be named, contrary to the views in the report, that they are only few and far between—and the Fiscal Agency would be broken in a single day.[2]

More important even than the discussion in the Senate were the expressions of Andrew Jackson with reference to this Tyler plan for an Exchequer Board. In his message proposing the plan, President Tyler had claimed that the plan he proposed was similar to that which had been advocated by President Jackson, and Senator Rives of Virginia had made a similar claim in the Senate. These claims having been brought to the attention of Jackson, he wrote two letters to William B. Lewis, his intimate friend and the man who had been the chief of his kitchen cabinet. In the first of these, he said:

I informed you in my last, that I regretted that part of the President's message that recommended a paper currency of treasury notes, and as the President has observed that it was shadowed forth by my message of 1830, I sincerely regret that he did not fully embrace the propositions therein set forth. Turn to it and you will find that there is no expression there that will justify the idea

[1] *Congressional Globe*, 27th Cong., 2d sess., p. 70.

[2] *Ibid.*, app., pp. 55-6.

of Congress making a paper currency of any kind, much less by issue of treasury notes—and it is impossible to make out of any paper system a sound circulating and uniform currency.[1]

In the second letter, written two weeks later, he said:

I discover that Mr. Rives has adverted to my message of 1830 in support of the measures recommended. I regretted to see this—it shows him uncandid, because there is no likeness between them. * * * * * * My explanatory remarks show this. * * * * * The word bank was used by me in its proper sense to distinguish it from an incorporated bank—*a place where the money of the government was to be kept*, to clearly show that it was to have no stockholders, no power to issue paper, discount or exchange and if Mr. Rives will read all my messages and my farewell address which was intended to give my full views on banking he will find he has done me great injustice in referring to my messages, as authority for the fiscal plan proposed by President Tyler. Every one who knows me, must be aware of my universal hostility against all government paper currency. The old continental currency was sufficient to convince me that a greater curse could not visit a nation than a paper currency.[2]

After these discussions, the bill was referred to committees as I have already stated. In the house report, the committee of which Caleb Cushing was chairman recommended a change requiring gold and silver to be held equal to the amount of notes issued, making them substantially coin certificates. They held that it was no part of the business of the federal government to carry on, directly or indirectly, a business of discounting notes or bills or otherwise lending money, or to furnish funds to be so lent. The committee of the Senate recommended changing the formation of the board by leaving out the *ex-officio* members. They also provided that the amount of note issue should never exceed the actual amount of specie on hand, dollar for dollar, stating that the committee were of the opinion that no paper should issue on the credit of the government to circulate as money, and that such issue would be in violation of a great, fundamental principle. Even in the modified form proposed, the bill found no sub-

[1] W. G. Sumner, *Andrew Jackson*, pp. 286-7. [2] *Ibid.*

stantial support in either house and the Tyler plan went down into oblivion with the unanimous disapproval of the men of all parties, only to be restored three quarters of a century later as a Democratic party measure. Every criticism made by the great leaders of the Democratic party in 1841 of the Tyler plan would apply with even greater force to the plan of the bill we are considering. It seems somewhat singular that a Democratic administration should have selected the plan of John Tyler for the creation of an Exchequer Board as a model for their plan of a Federal Reserve Board.

FEDERAL RESERVE BOARD A GOVERNMENT CENTRAL BANK

I have stated that by the establishment of the Federal Reserve Board Congress would create a government central bank. The board is a bank of issue, as all the government notes authorized by the bill are issued by it. It is a bank of discount as it makes loans of government notes to Federal Reserve Banks, taking commercial paper as collateral at a rate of discount fixed by the board. The following recital in outline of the powers granted and functions assigned by the bill to the Federal Reserve Board fixes its character as a central bank. The imperial powers improvidently granted, and the authority given the Federal Reserve Board over reserve banks and their members, are vastly greater than those exercised by any central bank in existence. The reserve banks and their offices scattered throughout the country are for many purposes merely branches of the central board. This board is described by the committee which reported the bill in the House as a "general board of management intrusted with the power to overlook and direct the general functions of the banks referred to."

The Federal Reserve Board has authority to create and readjust districts within which federal reserve banks are to be located. It may permit state banks to become members, and may also suspend such banks from membership at its discretion. It may establish branches of the federal reserve banks within each federal reserve district and prescribe their management. There might possibly be 200 of such branches

in the United States on this basis. The board fixes the compensation of all the directors of the federal reserve banks. Of the nine directors of the reserve banks six, three representing the shareholding banks and three representing the commercial and other interests of the district, are elected by the member banks acting in groups which are established by the agent of the Federal Reserve Board, and the elections are held under the supervision of the same agent who, by various provisions, becomes an important, if not a controlling factor in all elections. The central board appoints three of the nine directors, and it has the power to remove three others, if in its opinion they are not proper representatives of the commercial interests of the districts. The central board appoints the chairman of the board of directors of each reserve bank, who is evidently intended to be the manager of the bank, and who is also the agent of the central board for the transaction of its business. He reports all acts to the central board, which fixes his salary and can remove him at any time without notice and appoint another in his place. The directors of the bank have no control over him or his acts. The central board has an office in the reserve bank in charge of its agent, the chairman of the board. These provisions taken together give the central board a potential voice in the management of the reserve banks.

The central board has the right, subject to an exception, to determine or define the character of paper eligible for discount by the federal reserve banks; to fix the conditions under which member banks may discount 120-day paper; to review and determine the rate of discount which can be charged by federal reserve banks; to require, or, on application, to permit any federal reserve bank to rediscount paper of any other federal reserve bank. With reference to reserves, the power of the central board over the reserves of the federal reserve banks and of all national banks is plenary. It is authorized to suspend any and every provision of law with reference to the reserves of reserve banks or national banks, except that having reference to note issue. It has the power to add to the number of cities classified as central reserve cities, to reclassify

central reserve or reserve cities, and to designate any of the banks therein as country banks, at its discretion. The central board is authorized to issue, without any limitation as to the amount, obligations of the United States and to loan these on collateral to the reserve banks. The agent of the central board, who is also chairman of the board of the reserve bank, acts in the double capacity of applicant for loans and custodian of the collateral offered as security for the loan of government notes which may be made at any time, and has charge also of changes in collateral. The central board may, at its discretion, require a deposit by the federal reserve banks of a redemption fund of five per cent of the notes issued, and it can fix the rate of discount, not however less than one-half of one per cent per annum, for the loans of government notes to the reserve banks.

It may, at its discretion, suspend the operations of any federal reserve bank and appoint a receiver therefor. The routine business of the federal reserve banks is also under the control of the central board. It may make regulations governing the transfer of funds between the federal reserve banks. The central board may itself act as a clearing house for federal reserve banks or may require, at its discretion, the federal reserve banks to act as clearing houses for shareholding banks. It may remove officials of the banks for incompetency; it may require the writing-off of doubtful or worthless assets upon the books of the reserve banks; it may levy semi-annual assessments upon the reserve banks for the expenses of the central board.

The central board is given the power to exempt national banks from those provisions of law which restrict the character of their investments, and may reduce the number of cities within which national banks are permitted to make loans upon real estate. It is given not only the power to regulate the savings departments of national banks, but it can fix the character of their investments, which may differ in different parts of the country. The central board may fix the terms upon which national banks may apply for authority to establish branches in foreign countries, and it may reject any applica-

tion on the ground that its approval would be inexpedient. By an unusual provision, the central board is authorized to perform all the duties, functions and services implied by the act in addition to those that are specified. How extensive this grant of power may be, it is impossible to say. By another provision, extraordinary in its character, the central board is authorized to levy taxes on all banks, national, state, or reserve, whenever their reserves fall below a point to be fixed by the board. There is no limit fixed for the amount of the levy and no rule laid down which is to be followed in making the assessment. It will not be possible for me in the time I have at my disposal to take up and examine in detail this long list of powers granted to the central board. It must be evident that it contains more than one grant of legislative power which, upon principles heretofore declared by the courts, would be pronounced unconstitutional.

By the different provisions of the bill with reference to reserves it might happen that one bank in the city of New York or any other reserve city would be required to have 18% reserve, another one 12% and another no reserve at all. The mere existence of this power of discrimination might, in itself, have a very persuasive influence, political or otherwise, upon the attitude of all the banks towards an administration which could dispense favors and impose penalties of this nature.

The Federal Board is given the power to review and determine each week, or as much oftener as required, the rate of discount to be charged by each reserve bank for each class of paper. This provision contemplates different rates for different sections of the country and different rates on different classes of paper. In other words, the board sitting in Washington will be called upon to review and determine, at least once a week, 48 rates of discount covering the entire country, and to fix these rates—in the language of the bill—"in view of accommodating the commerce of the country."

The fixing of this miscellaneous collection of rates could not possibly be made effective for any of the purposes for which bank rates are fixed and changed in other commercial

countries. There can be no justification for fixing a different rate of discount to be charged by a government institution, supposedly created in the public interest, on the same class of paper in one section of the country as distinguished from another. The bill evidently contemplates a higher discount rate in the South and West than in eastern or central localities. In other words, the rate might be 4% in New York and 6 or 8% in Nebraska or Texas.

It should be borne in mind that we are dealing with official rates and not commercial rates, which are controlled more or less by local conditions. Any substantial difference in rate fixed for federal reserve banks would send standard commercial paper from one district to another by direct or indirect means, to secure the benefit of the lower rates. In my opinion it is of the very highest importance to the people of the South and West that there should be a uniformity of rates in all the reserve banks for identical classes of paper. Any other course would result in an unjust discrimination by the national authority between sections. Uniformity of rates is most important from the standpoint of the desirability of securing approximate equality of rates and facilities to every section of the country. There is no use in establishing standards for commercial paper if paper representing the products of the South and West is to be discriminated against by a government agency in contrast with paper representing the products or industries of the East. One of the principal purposes for which this government machinery is to be erected is to give the paper representing the products and industries of the country a new and better status in our own markets and those of the world. Can this be accomplished if we declare that the securities of great sections of our common country are not entitled to the credit which is accorded to those of other sections in government banks?

One of the main purposes of creating the federal reserve banks is to secure such a concentration of reserves as will permit their prompt use in any amount and in any part of the country to establish confidence and avoid panics. I think it must be evident to anyone familiar with conditions that the

creation of these twelve or more federal reserve banks will not accomplish this purpose.

The Federal Reserve Board, an organization without capital or financial responsibility, has no reserves of its own and is given no control over the reserves of the reserve banks. It has power to increase, at its discretion, the demand obligations of the United States, but it has no power, in times of stress, to keep the banks or the Treasury on a gold basis, or to prevent suspension of domestic or international exchanges. It is given, improvidently, autocratic powers over business of the banks—which can only be successfully managed by the men who own and control existing institutions and who are familiar with all local conditions. It is granted powers that can be properly exercised only by trained bankers, and it can take no effective action for relief in times of national or international crises. In great emergencies when some sustaining power is necessary, it will be powerless. It can take no steps in the interest of the country at large to control the movement of gold or to increase the supply of gold through negotiations with the great banks of Europe or otherwise. It might be able to control elections and insure the success of a political party, but, in times of stress, it would have no power to preserve public or private credit. It would be able to loan government notes to impecunious banking friends or to deposit government funds in "pet banks," but it would be unable to assist a bank or a community in time of serious trouble. It would have no status in the commercial world, and its standing at home would be fixed by its importance as a political machine rather than as a force in financial circles.

JACKSON'S GOVERNMENT BANK

Friends of a government central bank quote General Jackson as one of its advocates. It is true that he suggested on several occasions that it might be desirable to establish a government bank, but these suggestions were always more or less vague in character, and he never committed himself in detail to any definite plan. His opponents, however, claimed that General Jackson intended by these indefinite suggestions to advocate

the creation of a government central bank under political control, and that the effect would be to place the whole banking power of the country at the mercy of the President. I think it may be said that this claim did not fairly represent General Jackson's views and that he intended merely an institution like the independent treasury that should take over government business alone. The quotations which I have already made from his letters to William B. Lewis are confirmed in this respect by his statement with reference to the removal of the public deposits as follows:

> It is the desire of the President that the control of the banks of the country shall, as far as possible, be entirely separated from the political power of the country as well as wrested from an institution which has already attempted to subject the government to its will. In his opinion the action of the general government on this subject ought not to extend beyond the grant in the constitution, which only authorizes Congress "to coin money and regulate the value thereof;" all else belong to the states and the people, and must be regulated by public opinion and the interests of trade.[1]

The suggestion, however, led to a prolonged discussion on the merits of a government central bank.

The objections to the creation of a government central bank were never, perhaps, more clearly and forcibly stated than in the report of the House committee of ways and means, of which Mr. McDuffie of South Carolina was chairman, in 1830. In the course of this report, the following statement was made:

> It will be difficult to find any warrant, either in the letter or the spirit of the constitution, for the creation of this tremendous engine of pecuniary influence. It may, indeed, be doubted, whether all the branches of the legislative authority united have any constitutional power to lend the public revenue either to individuals, corporations, or states, without reference to the objects to which it shall be applied. But, whatever may be the power of Congress on this subject, it appears to the committee to be inexpedient, in every view of the question, that the government should be converted into

[1] F. N. Thorpe, *Statesmanship of Andrew Jackson*, p. 280.

a great money lender. There is no species of trade in which it would be wise for the government to embark; but of all the variety of pursuits known to human enterprise, that of lending money by the government to the citizens of the country, would be fraught with the most pernicious consequences. * * *

In the first place, it is a business to which, in the very nature of things, no government is adapted, and least of all, a popular government. There is no employment of capital that requires a more vigilant and skilful superintendence. * * *

Nothing that has not happened can be more certain, than that every unfavorable vicissitude in trade, every period of commercial distress and embarrassment, would give rise to importunate and clamorous calls for indulgence, and for an injudicious extension of discounts, which no administration would have the firmness to resist. * * *

The government would have scarcely any faculty of resistance, when appeals for indulgence should come from all quarters of the Union, sustained by the strong plea of public distress and embarrassment. * * *

But the inevitable tendency of a government bank to involve the country in a paper system, is not, in the opinion of the committee, the greatest objection to it. The powerful and, in the hands of a bad administration, the irresistible and corrupting influence which it would exercise over the elections of the country, constitutes an objection more imposing than all others united. No matter by what means an administration might get into power, with such a tremendous engine in their hands it would be almost impossible to displace them, without some miraculous interposition of Providence.

Deeply impressed with the conviction that the weak point of free government is the absorbing tendency of executive patronage, and sincerely believing that the proposed bank would invest that branch of the government with a weight of moneyed influence, more dangerous in its character, and more powerful in its operation, than the entire mass of its present patronage, the committee have felt that they were imperiously called upon, by the highest considerations of public duty, to express the views they have presented, with a frankness and freedom demanded by the occasion.[1]

[1] M. St C. Clarke and D. A. Hall, *Bank of the U. S.*, pp. 758-9.

NATIONAL BANKS

It is sought to make the control of the Federal Reserve Board over the national banks of the country effective by compelling national banks to subscribe within a year to the stock of the federal reserve banks a sum equal to twenty per cent of their capital under penalty of dissolution in case of failure or refusal. The national banks are further required to deposit with the reserve banks a portion of their reserves. These drastic provisions disclose a lack of confidence on the part of the authors of the bill in the wisdom of its methods. The banks are now acting under charters for a fixed period under certain definite conditions which have been faithfully lived up to with the result that note holders have suffered no loss, and that depositors and shareholders have lost only infinitesimal amounts. The United States is bound by every equitable consideration to protect the banks from serious losses on their investments in government bonds.

I submit that it is not fair to impose upon these institutions as the price of their continued existence new, onerous, or impossible conditions, especially in legislation enacted ostensibly to assist them the better to discharge their duties to the public in times of trouble. The conditions imposed are of such a character that unless changed they cannot be accepted by the smaller banks which form a large majority of the national banks, without serious losses and dangerous impairment of their resources and their ability to serve the public. It will be noted that the penalty of dissolution goes into effect in one year, even if it has not been possible within that time to organize a single federal reserve bank with the requisite capital. It would seem that the only method by which a national bank could avoid the serious consequences of this legislation would be to take out a state charter and transfer its business through voluntary liquidation.

It does not seem possible that the authors of this bill can have considered the dreadful consequences that would ensue if the national banking system is broken up by enforced dissolution or liquidation. The national banks have outstand-

ing $742,000,000 of circulating notes and banks going out of existence must deposit lawful money in the treasury for their redemption. These banks hold $685,000,000 of 2% bonds. A state bank could not afford to hold these for investment and their sale would mean a large loss to the owners, and the credit of the United States would suffer unmeasured injury. It is safe to say that the serious disarrangement of credits, the contraction of circulating medium and the destruction of confidence that would certainly arise from a transfer of any considerable amount of the banking business of the country from the national to the state system would end in a financial panic such as has never been seen in any country.

RESERVES OF NATIONAL BANKS

Under the provisions of the national banking act establishing the character and amount of reserves for national banks a system has grown up which in the main under normal conditions is satisfactory to both the banks and the public. It has been found ineffective in times of crisis, and the rigid provision forbidding discounts whenever the legal limit of reserves is reached is unsatisfactory in operation, but there has been no popular demand for a reduction of the amount of reserves required. As authorized by law country banks maintain balances with reserve agents in local centers and in central reserve cities. This arrangement affects favorably the convenience and the revenues of banks of all classes. Banks are obliged to maintain balances with correspondents or reserve agents for exchange and collection as well as reserve purposes. Banks in reserve cities have been able to use a portion of the deposits of country banks, and this use has assisted in the development of important business centers in various parts of the country.

The relations between country banks and their reserve agents have been usually of an intimate character. The banks which act as reserve agents are, in almost every case, important institutions of large capital and resources, and in ordinary times amply able to respond to any demands for the reserves in their custody, as well as to furnish assistance and

support to their country correspondents in cash or credit whenever required.

The country banks receive a revenue from their deposits with reserve agents and can invest a portion of their capital more profitably than in the capital of the reserve banks. If the bill should pass in the form proposed it would take away from the country banks an important part of their revenue by the requirement that reserve banks shall accept checks and other collection items at par. But these results are unimportant compared with the fact that their deposit in reserve banks might not be available even in the ordinary times for reserve purposes, as the scheme of the bill contemplates making the reserve banks mere discounting machines which may be kept in perpetual operation to their full capacity, in order to prevent a contraction of credits. The framers of the bill evidently not only intend that the reserve banks shall make loans to their members to the extent of their deposits, but it is suggested that they may loan them the money to pay for their subscriptions to the capital of the reserve banks. Banks that do not borrow money for loaning purposes would find that their reserve had disappeared in loans to rival institutions.

It should not be forgotten that the United States has a first lien upon all the assets of the reserve banks as security for government deposits and for issues of government notes which have been loaned to them. In cases of large losses by the banks this preference would be a serious matter for the bank's creditors.

The change from the old system to the new involves a direct loss to the country banks and imperils their investments and deposits. National banks are required, upon penalty of dissolution, to submit to the losses and inconvenience I have referred to.

The principal advantage which national banks have over state banks is in the profit they derive from their note circulation and the fact that they are permitted to share at times in the benefits of government deposits. Both of these advantages are practically removed by the bill, one to take effect immediately and the other by the progressive reduction in

national bank note issues. Country banks hold a much larger proportion of their capital in United States bonds than city banks. These bonds have been bought in many cases within the last ten or twelve years, and bought with the belief that the national banking system was to be permanent and that they were not likely to be deprived of their charter rights. The losses on their holdings of government bonds, unless Congress shall take effective means for their relief, will be a serious matter to these institutions. 59% of the national banks have less than $100,000 capital; 91% have less than $250,000 capital. Of state banks the proportion of small banks to the total number is much greater.

We should not lose sight of the fact that the national banks in many localities have not been able to compete successfully for business with the state banks. In 1912 67% of the individual deposits of the country was in state institutions. The number of these institutions is practically three times as great as that of national banks. The remarkable growth of state banking institutions has been largely owing to advantages growing out of more liberal reserve requirements and out of the fact that they have been able under state laws to transact business which is forbidden to national banks.

With reference to state reserve requirements, ten states have no provisions at all for reserves. In almost every state the provisions are more liberal than the national requirements In all states national bank notes can be counted as a part of the reserves of state banks, and in some states the reserves may consist in part, and in one state wholly, in securities. The laws of all the states leave the banks almost entirely free to deposit their funds in the banks of the great commercial centers. In most states they are entitled to keep a larger proportion of their reserves in the hands of reserve agents than is permitted by the banking act or the proposed bill.

With legislation depriving national banks of the advantages which they now have and imposing upon them new and onerous burdens, and with the state institutions retaining all the advantages which they now have, it is not unreasonable to expect the decline if not the extinction of the national system.

It is impossible to predict the effect which the radical reduction in the amount and change in the custody of the reserves of national banks will have upon the business of the country. It is certain that the effect at first will be to create confusion and uncertainty, and that the readjustment of credits and withdrawal of deposits will lead to credit contraction. Just what amount of credit expansion will take place later owing to reduction of reserves depends upon whether the national banks accept the legal limit of cash reserves fixed by the bill as a basis for their future credit operations. One of the witnesses who appeared before the Senate committee estimated that the national banks hold 12.75% of their net deposits in cash. He estimated that under the House bill a cash reserve of 6.8% will be required. If the national banks should continue, notwithstanding the provisions of law, to maintain a cash reserve of 12.75% against their liabilities, the result of the changes proposed by the bill would be a contraction of credits. If on the other hand the credit business of the national banks is to be conducted hereafter on a 6.8% cash basis, this, taken in connection with an expansion of note issues, would certainly lead to indefinite and destructive inflation.

One of the purposes of the proposed legislation, as stated by its friends, is to take from the bankers the control of the banking and monetary interests of the country and to place it in the hands of a Federal Reserve Board, and to prevent the concentration of money in New York and other great financial centers by the creation of twelve federal reserve banks. The reserve banks are to take over and hold reserves now held by the banks in reserve and central reserve cities, with a view of weakening, if not of destroying, the supremacy of the money power, or of the money trust, as it is sometimes described by political reformers. To aid in the accomplishment of this purpose, the new system of reserves as well as of reserve banks is proposed. Keeping these purposes in mind, it is desirable to examine somewhat in detail the methods proposed for their accomplishment. The cash reserve of the banks in the central reserve cities is reduced from twenty-five to nine per cent. The change in the custody of the reserves is more apparent than real.

59% of the national banking capital of the country is located in thirteen states, classified in the comptroller's report as eastern and middle western states, while the other thirty-six have 41% of the capital. The thirteen states have 67% of the banking resources of the country, while the other thirty-six have 33% of these resources. The capital of the federal reserve banks is fixed by a percentage of the capitalization of the national banks. It follows that 59% of the capital of these banks will be located in the thirteen states. The deposit of the reserves in these thirteen states, outside of government deposits, will be 67% of those of the country. If we assume that the central board will not exercise the powers of control over the management of the reserve banks and that the banks in these states will have the potential voice in the management of the reserve banks in their section that some of the friends of the measure claim, the supremacy of the money power of the East will be strengthened rather than weakened by the House bill. A portion of the capital and resources of the section are transferred from one class of organization to another without change of ownership. A new machine to be operated by the same men is set up with government approval. The banks in different sections are not controlled by conflicting interests, but if they were, this legislation would only emphasize existing conditions.

If four reserve banks should be located in these thirteen states they would, on the basis that all national banks assented, have a capital of about fifteen millions each. The eight located in the remaining thirty-six states would have a capital of about five millions each. The reserve bank in New York would have a larger capital and much greater resources than the three that might be located in the thirteen southern states.

It is true that a very large amount will be withdrawn, by the operations of the bill, from the banks in the reserve and central reserve cities, but at least two-thirds of this amount will be redeposited in the reserve banks in the thirteen eastern and middle western states. If we assume that these reserve banks are simply adjuncts of existing institutions, this process

will consist largely of taking money out of one pocket and putting it into another.

The treatment of bank reserves in the central reserve cities is interesting. They now hold cash reserves amounting to 407 million dollars, this being 25% of their net deposits, and this must be held in their vaults and cannot be used for any other purpose. By the terms of the bill they would be required to hold only 146 millions in cash and 261 millions would be released for other purposes; but 146 millions might be deposited in a reserve bank where it would form a basis for discount, leaving 115 millions available as a basis for credit expansion. If cash reserves are accepted as the basis for credit expansion, the banks in the central reserve cities will be able to increase their loans in the proportion of 9 to 25 under the new law as compared with the old. If the bankers of New York and other central reserve cities should consult their selfish interest they would be found earnest advocates of the new plan.

It was undoubtedly intended that the reserves concentrated in the reserve banks should be made available for the assistance and support of any bank or banks in time of serious trouble. Heretofore, scattered reserves have been found useless and panics precipitated by a general scramble of banks throughout the country to increase their cash reserves. The trouble, I am sure, would be intensified rather than relieved by the creation of this new class of banks. In addition to 29,000 banks, each looking out for itself, we should have twelve reserve banks of varying size and importance, each trying to protect its own reserves and the interests of its own section. The great disparity in the financial strength of these banks would give some great advantage over others in this contest. New York and Chicago, with their immense resources and foreign connections, if relieved from responsibility for other sections of the country, as proposed, could easily obtain the gold necessary to protect themselves and enable them to meet their obligations. Other sections might not be so fortunate. That the authors of the plan believe that it could not be relied upon in emergencies and that it would fail when a real concentra-

tion of reserves and resources was necessary, is shown by the provision that the central board may require one reserve bank to rediscount the commercial paper of another. It would be almost impossible to put this plan of relief into operation without doing more harm than good. Its wise administration would necessitate an intimate knowledge, on the part of the central board, of the financial condition and loaning power of each of the reserve banks; otherwise the transaction might of itself precipitate a crisis.

The other method by which it is proposed to afford relief to banks or communities in trouble is by a transfer of government deposits from one reserve bank to another. The government cannot afford to maintain a large surplus for the purpose of transferring it from one section to another for relief purposes. This method would be equally perilous with the other. Transactions of this character, as well as the enforced discounts, would appear in the weekly reports of the reserve banks, and the knowledge that a bank in any section of the country was in such need of assistance as to demand help on such terms, would be likely to cause a run upon the advertised institution and the attempt to relieve might not only prove futile, but productive of serious results. The deposit of treasury funds in 1907 was efficacious in helping to restore confidence, but in that case the money was taken from the treasury, and not withdrawn from one bank to be deposited in another; otherwise the beneficial results would have been lost.

The suggestion of these questionable methods of making the resources of one reserve bank available for the relief of another discloses the inherent weakness of the plan. To be effective, the capital and resources of reserve banks must be concentrated under the control of some central organization.

CONTROL OF FEDERAL BOARD

As I have shown, by the terms of the bill national banks are obliged to furnish the capital and the deposits of the federal reserve banks, the only other depositor being the United States. They are obliged to invest a part of their

funds and to place a considerable part of their resources beyond their own control or to submit to a sacrifice of their property and business. This large contribution of national banks is placed under the control of political appointees, the majority of whom of necessity cannot have the knowledge or experience to qualify them for the important duties assigned to them.

The national banks are forced into the position of stockholders and principal creditors of the reserve banks. The reserve banks are forced to conduct their affairs under instructions from the central board, and yet neither the reserve banks nor the national banks are allowed to participate in any way in the management of the central board. It is not a question whether the banks are to be permitted to control the board created to supervise their transactions, but whether they shall have any voice whatever in the management of their own property. There is nothing in our form of government, the basic principles of democracy, or the equitable principles which should govern the organization of society, which warrants any such exclusion. If this usurpation of the rights of property of protesting citizens is not without warrant in our constitution, it certainly is in violation of every principle of equity.

The attempt is made by the friends of the measure to justify this exclusion from the councils of the proposed government central bank by a reference to the means by which central banks of Europe are controlled, but a comparison of the manner in which the central banks of the three most important commercial nations of Europe are controlled with that suggested for this government central bank would show that no precedent can be found in European practise for the action contemplated in this case. The question at issue is what, if any, voice shareholders have in the management of any European central banks. European central banks have no control whatever over the joint stock banks or their management.

A comparison of the manner in which the central banks of the three most important commercial nations of Europe are controlled with that suggested for this government central bank, is of interest to us. With a very few exceptions (Russia

and Sweden are the only important ones) the central banks of Europe are private institutions, in the sense that their shares are held entirely by private owners, but the character of their management varies.

In the case of the Bank of England, the government has no voice in its management, nor does it own any stock in the bank. The supreme control is vested in the governor, deputy governor, and 24 directors, all elected annually by the shareholders. It is the custom of the shareholders to elect merchants, representatives of important business houses, to membership on the board, and to exclude bankers, directors of joint stock banks and brokers. This custom is undoubtedly a proper one and is, I think, adopted universally in other institutions of a similar character. I have never heard of any suggestion that a different course should be followed in this country. The inclusion, however, of merchants as the principal directors of the Bank of England admits to membership representatives of all the greatest banking houses of the world. These merchant houses are called banking houses in this country, and on the board of directors of the Bank of England are found the representatives of houses like the Rothschilds, Barings and Morgans. The case we are considering is not one as to who should be selected by shareholders on a board of direction, but whether shareholders should have any representation in the management.

The Bank of France is a private establishment and the government owns no shares. The management of the bank is in the hands of a governor and two deputy governors, who are appointed by the Chief of State and a board of fifteen regents (five of the regents must be chosen from the commercial and industrial classes), and three censors (auditors) who are elected annually at a meeting of shareholders. The regents correspond practically to the board of directors of our banks. They decide upon all important matters of policy and management, including the fixing of the bank rate.

The administration of the Imperial Bank of Germany is carried on by three boards: (1) The Curatorium, consisting of the Chancellor of the Empire, one member appointed by the

Emperor, and three elected by the Federal Council from its own members. The board meets once in three months and very rarely interferes in the actual management of the bank. (2) The Directorium or Directorate, or board of managers, consisting of the president, vice-president, and seven others, who are the active managers of the different departments of the bank and who are appointed for life. These are recommended to the Emperor by the Federal Council and appointed by him. In their appointment the Central Ausschuss are consulted. (3) The Central Ausschuss. The powers and functions of this board are defined by the Vice-President of the Reichsbank, Dr. von Glasenapp, as follows:

The third body, the Central Ausschuss (which takes the place of our directors) is composed of 15 members, who are elected at the annual meeting of the stockholders, together with 15 alternates, who serve in the absence of any of the members of the board. This body meets once a month. From among their numbers they appoint a sub-committee, known as deputies of the Central Ausschuss, of 3 members and 3 alternates. The deputies meet weekly with the president and managers. The Central Ausschuss are made familiar with the transactions carried on by the bank and give their advice and recommendations to the Direktorium in reference thereto. In practise, their advice is generally carefully considered and taken. In the fixing of the bank rate, it is their custom to call a special meeting, if need be, of the Central Ausschuss, who always confer in regard to the advisablity of a change in the bank rate.

MANAGEMENT OF BANKS

The experience of banking institutions generally establishes the fact that the best results are obtained by leaving the practical management of banking affairs to men of tried capacity and experience, whose positions are of a permanent character, and whose services in most cases command large salaries on account of the nature of their responsibilities. Successful banking on any considerable scale can be carried on only in this way. There is a clear distinction between

the actual managers of a great bank, that is, those who have charge of its technical banking business, and the directors who pass in a more or less perfunctory way upon the action of the managers, and who decide upon important questions of general policy affecting the bank. This distinction is rarely defined by law, but it exists in all well managed banking institutions. It is sufficient to say that there is no important banking institution in existence that could prosper under the sole management of a political board whose membership was certain to be changed at least once in four years.

SOCIALISTIC CHARACTER OF THE BILL

I am aware that there seems to be a marked tendency in recent years, in some quarters, to abandon the doctrine that states have still any virile powers under our form of government, and to assent to the concentration of all powers and authority in the national government, to be exercised through Congress, or in later days, through agents of the executive. But this is, I think, the first attempt to give a government board the right to manage a great business, which is more important in its intimate relations to all the people than any other. If the attempt is successful it will be the first and most important step toward changing our form of government from a democracy to an autocracy. No imperial government in Europe would venture to suggest, much less enact, legislation of this kind.

It will be remembered that the Federal Reserve Board consists of three members of the President's official family and four others to be appointed by the President and confirmed by the Senate. One of the four members is made manager and executive officer of the board, and acts under the supervision of the Secretary of the Treasury, who is made chairman of the board. It is provided that not more than two of the appointed members shall be of the same political party. These provisions taken together fix the character of the board as a political organization. Every change in administration means a change of four, and probably five, of seven members of the board.

As I have shown, the powers granted to this central board are intended to give it the control of the functions and the business of the reserve banks by arbitrary, direct, or indirect methods. It is clearly intended that the government of the United States, through these instrumentalities, shall be placed in a position where it can control and manage the banking business of the country. It is further intended that government obligations shall ultimately take the place of all other forms of note issues. This general purpose is either illy concealed or openly announced by the promoters and advocates of the plan.

The creation of this board, with its improvident grants of executive and legislative authority, is repugnant to every fundamental principle of popular government. No instrumentality could be further removed from popular control. The functions of the board are exercised in secret and there is no provision for publicity of any kind, except an annual report to Congress. There can be no review of its opinions and no appeal from its decisions. It is doubtful whether its members could be impeached for flagrant abuse of power. They are appointed by the President and are apparently responsible to him alone for the manner in which they discharge their duties. This attempt to give to a political oligarchy the power to control the banks and currency of the country, to be exercised at its discretion, with no means of preventing or punishing abuses, is promoted by the same men who are proclaiming their purpose to destroy monopolies and to repeal all grants of special privilege. No monopoly or grant of special privilege could be so great, so far-reaching in its consequences, as that proposed by the bill under consideration.

The proposition that our government has the power, or could properly exercise the right, to take possession and control, through its agents, of the private business of its citizens, has never before been seriously advocated in this country. No reason can be given why the United States should take over and manage the banking business of the country which does not apply with equal force to any of our important industries or business organizations. In other countries the

doctrine of state socialism has found vigorous support from a limited class, but the experiment of managing private business by government agencies has not yet been tried.

The creation of this board, however, is clearly a favorable response to socialistic demands. The aims of socialism were recently defined as follows by an acknowledged authority: "It demands that the machinery of wealth-creation be taken from the individual capitalist, and placed in the hands of the nation to be organized and operated for the benefit of the whole people." There could be no more accurate description of the proposals we are considering.

It is urged in answer that the President, having only the public interests in view, would appoint men of the highest class, men whose patriotism and loyalty to the public interests would be unquestioned, and that therefore no evil results could follow. Good appointments will undoubtedly be made, but legislators are bound to take into account the possibility that an ambitious man in the presidential chair might use the great powers of this organization to advance the interests of a political party or to perpetuate an administration. A President who had the power to dominate his party and to dictate to Congress, if he were at the same time ambitious for the succession, might be tempted to use for personal or party purposes an organization of his own creation whose influence for this purpose would be irresistible.

The President has not as yet, I believe, expressed his concurrence with Mr. Bryan as to the transcendent importance of government note issues. In his earlier days he was enthusiastic in his defense of the Second Bank of the United States. He said:

> Only a great commanding bank, everywhere known, whose notes really and always represented gold could supply paper worth its face value in all places or keep exchanges from chaos. Such an agency of adjustment and control the Bank of the United States had proved itself to be. It had not only served its purpose as a fiscal agent of the government to the satisfaction of the treasury, but had also steadied and facilitated every legitimate business transaction and rid the money market of its worst dangers. But many

of the men to whom General Jackson was accustomed to listen believed, or affected to believe, that it had done much more, that its power was used to serve a party and to keep men who were no friends of the people or of popular rights in a position to manage and corrupt the whole politics of the nation.[1]

The President will undoubtedly concede that we cannot adopt the Bank of the United States as a model, but we should certainly seek to secure the qualities and results which he so eloquently ascribed to the bank. The accusation that the Second Bank of the United States advanced money on the paper of its political friends, and used its control over credits to perpetuate its existence and to defeat General Jackson had more effect in arraying public opinion against the bank than any other cause.

The bill we are considering was, it is said, prepared by three Virginians. I commend to these gentlemen the serious admonition of a distinguished son of Virginia, the friend and biographer of Jefferson, Professor George Tucker, of the University of Virginia. He said:

> Those who administer the federal government must be always expected to have a vigilant and active opposition; in other words, there will always be two great political parties in the country, one of which will be in favor of the administration, and the other will be opposed to it. Now, it is contrary to all experience to suppose that those who have so powerful a machine under their control as the whole banking power of the country, and which would be ten times as great as at present, by being undivided, would not be disposed to use it in favor of one party, and against the other; and, if skilfully used, what might it not achieve? The power of the late bank of the United States, with a capital of only $35,000,000, was thought, by some, to be formidable to the government as well as to the state banks, and this was one of the principal reasons assigned for putting it down; but what was its power, when exerted against that of the government, and of numerous rivals, commonly equal to itself in any one place, compared with what would be the power of all the banks united, when added to that of the government? If the people were capable of being bought, of trafficking away

[1] Woodrow Wilson, *History of the American People,* v. 4, p. 63.

their rights and liberties, a government, provided with such means, might be able to purchase them; and, though that should not be the fatal result, such an accession to the power and patronage of the government would make the will of its party resistless; and we know that no tyranny is more merciless and unprincipled than that of party. We every day see the men who compose it, tolerate and approve what, as individuals, they would revolt at. We may then infer, that such potent means of influence would not be conferred by any people possessing the smallest degree of discernment, or jealousy of power, and that in this country the experiment will never be made until the love of civil freedom shall cease to find a place in the hearts of the American people.[1]

I feel sure that it is not necessary to remind the Senate committee who have the responsibility of recommending proper legislation upon this subject, that no credit can attach to any Congress or administration unless the legislation adopted shall prove wise and effective. The features of the bill to which I have called attention are of such a character that they should not be accepted. I have tried to show that the House bill has serious defects. It appeals to the populists by adopting their plan of note issues; to the socialists by seeking to place the management of the most important private business of the country in the hands of the government; it seeks the support of bankers in great centers by its unexpected discrimination in their favor, but its dangerous doctrines and unwise methods do not appeal to the sound judgment of the American people. The bill as it stands with its partly ineffective and partly dangerous provisions would be detrimental to the interests of banks, with the exception, perhaps, of the great banks in the central reserve cities. Its objectionable features have neither the support of public opinion nor the approval of the banking fraternity. They are contrary to the teaching of economists and they are not supported by the judgment of practical men. Its immediate enactment is urged by its sponsors upon the plea that it will create confidence and furnish remedies. It just falls short in its beneficial features of

[1] Geo. Tucker, *Theory of Money and Banks Investigated,* pp. 266-8.

accomplishing a wise purpose and by the radical character of its objectionable provisions it threatens to upset business and to produce the evil results which it was projected to cure. Its authors have not ignored the lessons of experience, but are apparently afraid to make their legislation conform to its teachings, on account of the declarations of a party platform.

For centuries the world has witnessed recurring waves of popular delusion with reference to the magical power of paper money and the belief that wealth could be created by the stamp of the government upon pieces of paper. The losses occasioned by the folly of one generation have not deterred their successors from trying the same experiment and with the same results. It is, however, a source of satisfaction to the philosophic student of history to realize that no matter how severe the attack of monetary mania may be, sooner or later sanity will return and intelligence regain its control. We should keep in mind that any departure from sound economic principles will surely invite new disaster. There can be no permanent and satisfactory solution of this great problem, so fraught with momentous consequences, until the American people shall be satisfied, after careful investigation or experience, that any plan proposed or adopted will surely respond to their reasonable demands for banking and monetary reform. Questions of this character cannot be finally settled by the majority of a party caucus or by the mere force of executive dictation. There are much broader questions involved than how best to secure an advantage to a political party. Any attempt to construct a plan for monetary reform upon a basis of sectional or political prejudices must fail. The enactment of legislation having this basis will raise an issue that will surely overshadow every other in future political contests.

No large part of the American people had any idea that the election of 1912 involved a reopening on the part of Mr. Bryan and his friends of the controversies of the past and an endeavor to secure, by partisan legislation, the triumph of the doctrines and principles which had received the repeated condemnation of the American people at the polls. This should be a fight in the open. The party in power has no accredited mission to

reverse these repeated judgments and to fly in the face of the concurrent judgment of the people of every commercial nation, based on universal experience.

Unless the teachings of an unbroken line of great statesmen are to be ignored, the features of this bill that I have discussed must be rejected. The administration that should force upon the American people by arbitrary methods an unwise solution of this problem will merit and sooner or later receive the condemnation of thoughtful men of all political parties.

It is the irony of fate that in a measure whose sole purpose should be to give strength and stability to our banking institutions and to furnish the people with a currency whose value could never be questioned, it should be found necessary to sacrifice the principles of a great party and to make the national banks the unwilling instrument in the work of their own destruction in order that Mr. Bryan may proclaim to the world a triumph of transcendent importance for his monetary and governmental theories.

Let us hope that the sober second thought of the national legislature may lead it to reject false doctrines and with a patriotic spirit to construct a plan of banking reform which is worthy the intelligence of a great people and which will serve their highest interests.

THE FEDERAL RESERVE BANKS[1]

H. PARKER WILLIS

City Editor, Journal of Commerce and Commercial Bulletin

THE federal reserve banks proposed by the pending currency bill may be briefly described. They are bankers' banks and they are intended to do for the banker what he himself does for the public. They are to economize and systematize his funds and his dealings, to facilitate his communication with his associates and rivals, and to supply him with accommodation when he needs it. If this is what the so-called regional banks are to do, and if they can successfully do it, they need neither explanation nor defense, for both their purpose and their method are as old as modern business.

Indeed, there is nothing new about the idea of the regional reserve banks. Some students of the currency question have traced them back to the fatherhood of ex-Senator Aldrich of Rhode Island. They have been said to be identical in organization and in purpose with the central reserve association to which his name has been attached. But these are superficial students of the situation. They should carry their studies at least as far back as the Fowler federal reserve bank bill of 1908, or the Muhlemann central reserve bank plan of several years earlier. Better still, they might consider the type of organization of our clearing houses and the conditions under which the latter have for years past aided and perfected the operations of their member banks. There is no idea in the Aldrich bill that can properly be claimed as a distinct novelty nor is there any fundamental idea in those phrases of the new currency bill relating to the organization of the federal reserve banks which was either drawn from the Aldrich bill as such or is original with itself. The merit of the Aldrich bill and of the new measure lies in the fact that both seek to apply familiar and

[1] Read at the meeting of the Academy of Political Science, October 14, 1913.

accepted ideas with reference to coöperation in banking. We can neither impute it unto the new bill for righteousness that it contains some ideas identical with the Aldrich plan nor can that fact be used to condemn it. Efforts in both of these directions have been failures thus far and will continue to be so.

Inasmuch as the idea of combined reserves and of united bank resources, controlled and administered in the interest of their owners and of the whole community, is neither new nor open to controversy, we may accept the broad, basic idea of the so-called regional banks as definitely settled. All that I am justified in presenting to you, therefore, is some matter relating to the detail of the plan for creating the proposed institutions. With reference to this matter of detail there are a few interesting points, most of which, however, have already received some attention.

The first in logical order, perhaps, is the capitalization of the banks. Gloomy predictions have been made concerning the inadequacy of the capital suggested. The new bill requires every member bank to contribute ten per cent of its own capitalization in current funds and it provides that no regional bank shall be organized with a capital less than $5,000,000. Many who have computed the probable working of this scheme have noted that owing to the great concentration of bank capital in the eastern states the proposed reserve banks in the South and West would have small capitals, some of them probably not much over the $5,000,000 minimum. Since the total capital of the reserve banks would be only about $105,000,000 they have argued that the twelve banks suggested would have an average capitalization of less than $9,000,000 each and that with the smallest the danger would be great that they would be unable in times of stress to fulfil their function. Those who thus argue fail to understand the fundamental elements of the proposed plan. The plan is essentially a scheme for combining reserves. It provides that when the various reserve banks have been organized their members shall place with them a specified minimum amount of their reserves while it is made an inducement to them to deposit an additional amount. Assuming that the total deposits of the national banks of the United States

subject to reserve requirements are $7,500,000,000, the amount which would be placed with these banks were they to comply with the requirement that at least five per cent of their outstanding deposits shall be balances with the reserve banks would be $375,000,000, while it is probable that in addition enough more to make the sum around $600,000,000 might be left with the new institutions. If the latter should prove to be the actual cash held by the reserve banks in trust for other banks, after the amount of rediscounts to be granted had been settled and adjusted, the average to each of the proposed twelve banks would be $50,000,000. In addition to this would be their capital and their share of the government deposits. The latter would probably average at least $15,000,000 per bank so that a representative of the new reserve institutions would start with from $65,000,000 to $75,000,000 of cash resources. Now I submit that a bank possessing $65,000,000 of clear cash is by no means a puny or weak institution. A comparison with some foreign banks bears out this view. Moreover, it must be evident that in any district or region of territory, if it be true that the resources of the reserve-holding bank of this kind are too small, the meaning simply is that the member banks ought to keep larger reserves. The basic error of those who complain of the reserve banks' capital is this: they seem to suppose that the banks are to be organized on a competitive business basis. Nothing of the kind is true. Indeed, it might serve well enough to organize the new banks without any capital or with only a nominal capitalization. Their strength and the whole test of their fitness and sufficiency depends upon their success as reserve holders. Their capitalization is of relatively little importance, except for the purpose of making a start and furnishing a buffer against possible loss.

A second matter, which is closely interrelated with the capitalization of the proposed banks, and to which considerable attention has been given, is the question of stockholders. Under the proposed plan every national bank must join the system or cease to be a national bank within a year. Much has been made of this so-called compulsory provision, and many severe epithets have been applied to it. It has been

called "socialistic," but unfortunately socialism is no longer a name to conjure with. It it were socialistic, perhaps the fact would make as many friends for the scheme as it would enemies. To us I suppose the interesting thing is whether the so-called compulsory provision is a good one or not. Let me say frankly that I think this matter is an open question. Certainly it would be very desirable if every bank called national were a member of a truly national system, subject to national jurisdiction, performing national duties and entitled to national support. But the other way of handling the situation has its advantages. In drafting the pending currency bill it was supposed that the banks would not care to have non-bankers operating the reserve banks, and so after much travail of spirit it was determined to yield this point and to have the new banks organized by bankers only. But strange to say, this was a case where, as the poet has expressed it, "A man's loss came to him from his gain, darkness from light, and from knowledge, ignorance." No sooner had the measure been promulgated than it was objected to upon this very score. It is probable that by making membership in the reserve banks voluntary and by throwing open to the general public the right to subscribe to the capital an object would be attained which was earnestly sought by the framers of the Aldrich bill in the multitude of cumbersome provisions by which that measure attempted to get business coöperation. In other words, a real interest on the part of merchants would be secured in the way referred to—by throwing open the subscription to the public. I believe that my audience is composed at least in part of merchants, and to them I wish to say that I believe it right for them to have a share in the control of the reserve banks. Perhaps a direct subscription to capital stock with a limited voting power would be the best way to get it. But would the banks themselves, which now complain of the compulsory features of the new plan, be satisfied with a scheme in which they had to deposit their reserves, whether stockholders or not, in the new reserve banks, while the latter were in part at least controlled by merchants and business men?

A third point with reference to which much mystery has been made and regarding which many abstruse screeds have

been written is the question whether the proposed reserve banks are too numerous. This is not merely a matter of capitalization. It has been asserted that the banks in question if organized to the number of twelve would be unable to do the work assigned, would be unable to control gold movements, would act inharmoniously, and would in various other ways prove to be a broken reed for the community to lean upon. This is a matter in which a limited amount of common sense is needed and very little more. Suppose we look at the continent of Europe. We find there the banks of France, Germany, Russia, Austria-Hungary, Italy, Belgium, Switzerland, Spain and various others. Some of these banks have very large resources, others relatively small ones. They are not more widely separated from one another by distance than the institutions of Maine and California or of Florida and Alaska. The difference of climate and of business methods is hardly greater between the north and south of Europe than between the north and south of the United States. Now suppose that through some historical course of development this continent had been broken into a variety of national areas. Would it have been impossible to establish a coöperative central banking institution in each such area? Would it have been feasible for such institutions to regulate the supply of gold going into and out of those areas and to control the credit supply in each? Why should it have been necessary to organize one single reserve-holding institution for the whole continent? Again, we see to-day north of our northern border twenty-seven strong institutions with hundreds of branches operating effectively and soundly and controlling the reserve resources of Canada in a satisfactory and efficient manner. Are there too many of them? If there are, the number will be reduced as in times past it has been. If Canada can support at present twenty-seven such institutions, can the United States not support twelve reserve-holding institutions? There is no argument from experience, no analogy from conditions in other countries that can be taken even remotely to sustain the demand for the consolidation of the reserve banks into one. How many there should ideally be, experience only can absolutely determine. It is fundamentally

necessary, therefore, that, whatever be the number with which we start, the way to the creation of more institutions of the kind shall be kept open. Neither should they be chartered for too long periods nor should their number be limited in any rigid manner nor should their charters be irrepealable during their life. Experience should dictate how large a group of banks is necessary to act together and yet get the benefits of coöperation and how large a group is likely to become unwieldy, overcentralized and difficult to control. For the present, investigation shows that twelve such banks may be a convenient number, while later experience will furnish the conclusive evidence whether the number should be increased or diminished.

Fourth, much attention has been lavished upon the relation which should exist between federal reserve banks. The pending bill proposes to make them independent of one another, except in so far as exchange balances may have to be kept in order to facilitate inter-bank payments. In time of emergency, the bill provides that the Federal Reserve Board shall have power to intervene and to require a given bank to rediscount under very stringent and limited conditions the paper of another, or to permit one to make such a rediscount at will if it desires. This provision also has been described as "socialistic," and has been condemned on that score, it being asserted that such an authority takes the control of the bank's own funds out of its own hands. Strangely enough, such criticism comes primarily from those who would like to see a single central reserve association established, notwithstanding that rediscounts between different parts of the country would be the staple business of such a reserve association. They seem also to ignore the past action of clearing-house banks in making their resources a common fund in case of disaster. And, strange to say, they are identical with those who want permission to have the reserve banks deal freely with one another. Consistency is important in banking as in everything else. Essentially the answer to this question of relations between reserve banks is found in the fundamental query, what are the reserve banks for? Not to make money beyond a fair moderate profit; not to compete with member banks beyond the point where such competition

is necessary to fulfil their purposes. Regular business with one another should be out of the question. There is no reason for altering that provision of the pending bill which forbids them to do any such business except in transferring funds.

There is a fifth point that, because of the space that has been given to it in some recent discussions of the subject, is worthy to be noted. This is the function of the so-called regional banks in handling domestic exchange. The bill provides that the banks shall accept certain checks on deposit from their stockholders without charge for exchange or collection and that member banks may if they choose make a charge to their customers for their services in transmitting funds. The object of this provision is evident. It would substitute a system of clearing country checks for the present method of collecting them and it would establish parity of exchange between all places in a federal reserve district and then between the federal reserve districts themselves. The banks could charge any fees they choose for exchange services, but in fact they would not do so. They would have to give their customers the advantage of the collection system thus introduced. Upon this seemingly innocent provision has been vented an immense amount of criticism. Most of it is simply reducible to a statement on the part of banks that they need the income they now derive from exchange services, a frank and blunt way of meeting the proposition that hardly needs discussion. I do not think it will appeal to the broad-minded banker who views his profession as a semi-public occupation. If we devote attention solely to the genuine theoretical aspect of this matter we shall arrive at a truer conception of the principles involved than if we look at the question through the distorting glass of commercial selfishness. Many years ago, when bank loans were made almost entirely by the issue of notes, this same problem was raised on account of the excessive charges for the transmission and redemption of notes to which the holders thereof were subject. The struggle through which the community then passed was closed by a unanimous agreement that henceforward the bank-note currency of the country should invariably be redeemable throughout the area of the nation at par. This general agree-

ment found expression in the national bank act, which provided for the compulsory receipt by every national bank at all times of the notes issued by every other national bank. The consequence has been that the national bank notes have invariably been received throughout the United States absolutely at par and without any charge for collection. Now after a long period of development we are engaged in revising the banking laws of the country, and we are confronted by the same question as in former times. But to-day the currency of the country consists essentially of credit instruments. The notes have become a minor matter relatively unimportant to the active business man, save under peculiar conditions. But the principles in the one case are exactly the same as those that controlled in the other. Fundamentally they indicate that whenever a banker creates an instrument of circulation it is his duty to maintain that instrument at par throughout the territory in which it circulates in order that no one may lose by a discount upon the credit currency thus provided. If in this process of maintenance at par the banker incurs expense, then he should charge a sufficient sum for the service he performs in creating the credit to warrant him in his action, and he should do it at the time he establishes the credit. The federal reserve banks will operate to bring about this end, and in so doing they will perform the same service for the credit instruments of the country that was rendered in former times by the Suffolk Bank of Boston, when after great trial and tribulation New England institutions were practically compelled to keep a deposit with the Suffolk for the redemption of their notes.

One final point in connection with the organization of the federal reserve banks is worthy of special note. It has been suggested that the effect of the creation of these reserve banks would be to bring about a very serious contraction of credit. To go in detail into the question whether such a contraction is reasonably to be feared or not under the proposed plan would take very much more than the limited time at my disposal and I cannot therefore venture to undertake it. Let me say in brief that the most careful computations thus far made show that there would be no such contraction as has been feared, even if the

reserve called for under the plan were to be established by making direct cash deposits with the federal reserve banks. Were the deposits to be made in that way, the result would be to call in perhaps $100,000,000 of net cash not now in the banks or at all events not now used by banks for reserve requirements. This however would be much more than offset by the immediate effect of the placing of the government funds in the banks and their consequent availability for immediate use. When the added power of credit extension due to the introduction of the rediscount system is considered, there is no comparison between the possibilities of the proposed reserve bank plan and that of the present banking system. The reserve banks would be able, if they saw fit, to increase by an enormous amount the accommodations now granted to the public. It has been computed that this possible extension would be $2,000,000,000. Whether to grant such an extension or not is a question of policy which the management of these banks could be expected to settle wisely and in the interest of the public as well as in their own. That they would permit any contraction to take place is, I think, out of the question.

In short, the reserve bank plan proposed furnishes a workable method of attaining the objects for which currency and banking reformers have so long striven. There is nothing in it that is unworkable or that may not reasonably be accepted by those who believe in the general principle of economy and combined control of bank reserves. If in their judgment there are elements in the plan which may prove clumsy, efforts should be directed to smoothing these defects away. It can be successfully done without altering either the general plan or the purpose of the bill now proposed. It would be strange indeed if the chance of attaining within a very short time what has been sought for years should be discarded merely because the method of reaching it was not in all respects to the liking of those who are to put it into operation.

CRITICISMS OF THE PROPOSED FEDERAL RESERVE BANK PLAN[1]

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THE administration's currency bill as it now stands in the Senate embodies many features that are fundamentally sound and consonant with the best traditions of banking theory and practise; such, for example, as the creation of a central bank with branches, the recognition of bank assets in the form of commercial paper as the normal and proper basis for bank-note currency, and the provision for the keeping of the current funds of the government in active use istead of locking a large part of them up in the subtreasuries. Despite these great merits and the substantial improvements that have been made in the bill by recent amendments, it still contains certain glaring defects which threaten its permanent usefulness. Inasmuch as helpful criticism of the defects of the measure rather than commendation of its merits is what is needed at the present time, I shall confine the brief time at my disposal to a consideration of the chief of these defects.

While a central authority has been created with more power than we should have expected the government to give to a central bank, the measure is defective in that it creates twelve central banks. Although it has been the commendable purpose of the bill to mobilize reserves and to prevent that scramble among banks for reserve money in times of danger which has been the bane of our present decentralized banking system with its rigid reserve requirements, this purpose clearly cannot be realized by the creation of twelve separate institutions. The method resorted to would divide the cash reserves of the country into as many different ownerships as there

[1] Read at the meeting of the Academy of Political Science, October 14, 1913.

are regional associations, thus nullifying the true aim of this whole measure.

No individual bank can now strengthen its cash reserves without at the same time and to the same extent depleting the reserve of some other bank, except by the importation of gold or by the occasional receipt of funds from the United States treasury. In the same way, no one of the regional reserve banks will be able to strengthen its cash reserves without drawing from and reducing to the same extent the reserve of one of the other banks, unless it imports gold. Government funds will all be in these regional banks. There will inevitably be competition among the regional reserve banks and among the twelve sections of the country in time of money stringency, just as to-day under similar conditions each of the twenty-nine thousand banks begins competing with the others to strengthen its cash reserves. Furthermore there is the possibility that this condition would exist among the individual banks as well. It appears that the framers of the measure realized the danger; but that they failed to meet it is shown by the provision authorizing the Federal Reserve Board arbitrarily to force one reserve bank to loan to another. This seems an open confession of the inability of the system automatically to adjust itself to the needs of the country. This shifting of funds could hardly be accomplished without ostentation and without notoriety; if the Federal Reserve Board should require, as it might do under this proposed law, one federal reserve bank to loan money to another, that could not be done without attracting attention to the borrowing locality in a way that would operate to the prejudice of that locality. There is strong probability that in exercising the authority to compel such a loan, the Federal Reserve Board would create a distrust that would endanger the smooth working of the whole plan.

It is wisely and properly provided that the regional reserve banks may extend their activities through the establishment of branches, providing only that the number of branches shall not exceed one for every $500,000 of capital of the federal reserve bank of which the branch is a part.

Would it not be far better if the law should create one central bank with branches wherever there is commercial need for them? Would not such a plan be simpler, less cumbersome and more efficient than the present plan of granting the Federal Reserve Board power to direct one section of the country to loan money to another? With all deposits in one central bank, they would naturally flow to the localities where most needed. Should danger arise at some point in our vast fabric of credit, would not one vast reserve be much more powerful to overcome it than twelve smaller reserves?

Under the proposed law the country is divided up into twelve districts, each to have a federal reserve bank and all to be under the general control of the Federal Reserve Board. That board is to consist of seven members—the Secretary of the Treasury, Secretary of Agriculture, comptroller of the currency, and four others to be appointed by the President and Senate, only one of whom must needs have had banking experience. The most serious objection to the organization of the board lies in the method of selecting its members. That a board so appointed would be dominated and controlled by political expediency is obvious. The three *ex-officio* members would owe their positions to their political affiliations, if not to their political activities. That the framers themselves recognize the difficulty of keeping the other four appointments free from party connection is shown in the provision stipulating that not more than two of the members should be selected from the same political party. Subjected as they are to all the whims of party favoritism, the members have not that attribute of independence that should attach to a board of this character. Its members, with a single exception, need have no previous experience in, or knowledge of, the banking business, the destinies of which are to be placed in their hands—a proposition which is its own best commentary upon their qualifications for handling intelligently so delicate a mechanism.

The Federal Reserve Board by its very nature will be nothing more nor less than a department of the administrative branch of the government charged with the direction and

control of the banking destinies of the country. In the event of a district desiring some special favors at the hands of the Federal Reserve Board, it would be in a position to make use of present political methods to secure the influence of senators and representatives in favor of that particular district. The banking community, as a class, has no representative on the Federal Reserve Board. This, together with the additional fact that, as a class, bankers have only a minority representation on the boards of the regional banks themselves, makes it manifestly unjust to require the banks to surrender so large a portion of their resources to the regional banks. To some extent, the regional banks will be competitors with the banks for business. Is it not going too far to expect that the banks should furnish one-fifth of their capital to an institution which will be a competitor?

National banks, and trust companies in New York, are required to make certain investments as a condition precedent to incorporation. Never before has it been specifically directed what investments going banks shall make; as, for example, that all national banks should invest twenty per cent of their capital in federal reserve bank stock, or that one regional bank should loan to another regional bank. Such legislation is clearly an invasion of the field of credit. Never before has such a power been conferred on any central bank. If the government may direct the disposition of a bank's resources to a limited extent, the question may well be raised whether it may not dispose of these resources in their entirety. Banks operating under charters, which have ever been regarded in the nature of a contract, are hereby forced to make this subscription, and it is doubtful if under our constitution Congress can take away the charter of a bank in this summary manner, because of the bank's refusal to make a coerced investment. This proposition of the government to take the bank's capital in the manner provided, carried to the extreme, might easily accomplish, so far as national banks are concerned, one of the fundamental tenets of socialism and transfer ownership to the government.

The Federal Reserve Board will have power to issue treas-

ury notes to the federal reserve banks upon the segregation of specified current assets of such banks as security. In addition to parting with its assets to an amount equal to the notes received, a federal reserve bank will have to maintain a 33⅓% gold reserve against such notes. The redemption of these notes becomes further a prior lien upon all the assets of the bank to which they have been issued. All this security would seem to make the notes good without necessitating the further obligation of the government. There appears no justification for creating a situation by which at some future time the credit of the government might be imperiled. With the balance of trade against us, making gold shipments necessary, a general crop failure, or war, the reserves of these federal reserve banks might be reduced below the point of safety. Whenever their reserves were brought to a point that warranted any criticism, the credit of the government itself as to its ability and purpose to redeem all notes in gold upon presentation would be called in question.

Should the proposed policy of treasury notes be adopted, and the obligations of the government immediately redeemable in gold thus be largely increased, there would be every reason to apprehend, under similar circumstances, a repetition of our experience of 1893, when our national credit was subjected to so severe a strain.

The government should unquestionably coin and furnish metal money; that is, the money of ultimate redemption, but the experience of the world proves that paper currency, redeemable in metal money, may better be furnished through a bank like the Bank of France or the Reichsbank of Germany, separately incorporated, under strict government control or regulation, but possessing current assets which have an everyday market at a price, and upon which it may at any time, if need be, realize. The provision making the government responsible for the treasury notes to be issued is fundamentally wrong, and this policy will inevitably invite future disaster.

THE ORGANIZATION OF THE FEDERAL RESERVE BANKS[1]

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COMPETENT management is one thing absolutely indispensable if our banking system is to be bettered by means of the new machinery for which provision is made in the Glass-Owen bill. A new class of banks is to be established having large powers to extend credit in the form of notes as well as in that of deposits. Upon these institutions is to be placed the heavy responsibility of safeguarding the entire credit structure of the country. To accomplish this, they must always keep themselves in strong condition, so as to be able at any time to relieve financial strain by supplying additional credit. They must also so handle their affairs as to be able to secure additional resources or at least check the depletion of such resources as they may possess. To accomplish this last result, they must be able to make their rates of discount effective. This cannot be accomplished unless they are able to exert some restraining influence over other dispensers of credit. Such restraining power is also requisite to lessen the dangerous tendency toward over-expansion of credit which may manifest itself when the other banks have these institutions to fall back upon in emergencies. The problems which will have to be solved by the management of the federal reserve banks are novel and in many respects distinctly unlike those with which our bankers have familiar experience.

It is of course true that the particular kind of mechanism to be established, the power of the management and the legislative restrictions designed to prevent unwise action are all important, but they are of secondary significance compared with the character of the management. Competent men can

[1] Read at the meeting of the Academy of Political Science, October 14, 1913.

get results working with very imperfect means; unwise management will wreck the most highly developed organization. No legislative restrictions can do much here. Indeed, in seeking to prevent mistakes they are pretty certain unduly to hamper the management in the exercise of a wise policy.

Notwithstanding the widely different powers and organization of the various European central banks and the widely different economic conditions in the various countries in which they are established, these banks all seem to work well. This is due primarily to the character of their management and to the experience which has been acquired and the precedents which have been established in the past. After a generation of experience, or even ten years, it will be a far simpler matter than at the outset to handle the federal reserve banks. At the beginning, until complete confidence in them has been gained and until wise precedents are established, the character of management is above everything else of supreme importance. It is, therefore, clearly most vital that the legislation regarding the selection of the management of the federal reserve banks should be framed in such a way as to give every possible certainty that it shall be placed in competent hands. But legislation regarding organization cannot be framed with this end solely in view.

Writing some four years ago, I said:

> The present juncture is an unfavorable moment for the establishment of a central bank, because men having the experience required for its management can hardly be found outside the circles of those who, as a class, have been the subject of widespread and exaggerated doubt and discredit. It is to be feared, especially if the bank is to be one of imposing magnitude, that in order to allay alarm, the details of organization would be prescribed and the powers of the management restricted in ways which might seriously impair its usefulness.[1]

This feeling of distrust is vastly stronger now than it was in 1908, and it has inevitably found expression in the Glass-Owen bill. Men with wide banking and business experience

[1] *Banking Reform in the United States*, p. 14.

must be selected to manage the federal reserve banks, but they must be selected in such a way that the mass of people will have confidence in their fairness and in the disinterestedness of their motives and policy. Even those who are convinced that a wiser and more capable management would be secured through arrangements such as those in the bill of the National Monetary Commission must realize that in the present state of public opinion, whether rightly or wrongly, large numbers of people would not have confidence in a board thus chosen. Provision must be made for a very considerable share of governmental influence in selecting the management of any institution such as that proposed in the bill of the National Monetary Commission or in the Glass-Owen bill. Otherwise there is little likelihood of legislation and even less likelihood of securing and maintaining that public confidence which is indispensable. If competent management cannot be secured by arrangements providing for a large measure of governmental control, then legislation of the sort which is being considered here to-day should not be attempted.

The arrangements in the Glass-Owen bill for selecting the management are simple, but the number of boards and the division of powers between them makes it most difficult to determine what their respective duties and influence will be in practise and even more difficult to forecast the quality of the boards themselves.

Each federal reserve bank is to have a board of nine directors, six of whom are to be chosen by the member banks, the remaining three by the Federal Reserve Board. The Federal Reserve Board is also to have the power to remove at any time three of the directors chosen by the banks—the three who, according to the bill, are fairly to represent agricultural, manufacturing and commercial interests, if in its judgment they do not fairly represent those interests. This power of removal at any time thus lodged with the Federal Reserve Board is objectionable in principle and indefensible from any point of view. If the three directors who are fairly to represent the various interests mentioned above do not so represent them, this should be evident at the time of their election.

Their appointment might well be made subject to the consent of the Federal Reserve Board, following in this respect the constitutional requirement of confirmation by the Senate of appointments of federal officials. In any event, the Federal Reserve Board can only by the exercise of its power of removal make it necessary for the member banks to select successors. The majority of the board of each federal reserve bank, therefore, remains definitely the choice of the banks. Entirely harmonious action by the boards of these banks might at times be lacking, because of the presence of the three governmental directors. The three could not, however, control the policy of any regional bank.

These boards of directors of the regional banks will be the most important part of the entire organization. All the loans of the regional banks are to be made by the boards of those banks. All rates of discount are in the first instance to be fixed by them and, though subject to review by the Federal Reserve Board, the decision of the regional boards in this matter is reasonably certain to be accepted in all ordinary cases. There is absolutely no possibility of loss of the funds entrusted to the regional banks by member banks and by the government, except from unsound banking by these boards, a majority of whose members are chosen by the member banks. Nothing that the Federal Reserve Board can do can by any possibility endanger the assets of a regional bank, unless the regional board concurs with the Federal Reserve Board; and there is no means of compelling such concurrence. The Federal Reserve Board is given large powers of restraint over the regional banks, but practically no power over the disposition which shall be made of their resources. The Federal Reserve Board may, for example, refuse to grant the request of the regional board for bank notes; but this will not endanger the assets of the bank; it will simply lessen its power to expand its operations. The Federal Reserve Board might, it is true, insist upon a lower rate of discount than was deemed wise by the directors of a given regional bank, but this could not endanger assets since the regional board would still determine the amount of the accommo-

dation which it might safely grant to member banks at this enforced low rate. The Federal Reserve Board may require one regional bank to lend to another, but only by a unanimous vote of its members, at least five of the seven being present, and at a rate at least one per cent higher than that prevailing with the borrower or the lending bank. Under these restrictions, compulsory inter-regional loans are most unlikely at any time, and in any case the board of the lending regional bank would have the right and duty of passing upon the security offered by its borrowing neighbor.

There would seem to be only one means by which the Federal Reserve Board might be able to exercise pressure upon a conservatively managed regional reserve bank. It might threaten to withdraw from it its share of government deposits. This is, however, a means of compulsion altogether unlikely to be resorted to. It is a power which has always been possessed since the establishment of the national banking system by the Secretary of the Treasury, but it has never been used. Remote possibilities of this sort should not excite alarm and do not require serious and detailed consideration.

With the change already suggested regarding directors representing commercial interests, the provisions in the Glass-Owen Bill seem admirably adapted for securing wise and competent management of the regional banks, and they insure a sufficient measure of government representation to give confidence among those people who are distrustful of banks and bankers. It should, however, be noted in this connection that, if the number of regional banks were somewhat smaller than the twelve for which the bill makes provision, there would be rather more certainty that the boards of the regional banks would be made up of men of wide experience and conservative tendencies. The time at my disposal, however, does not permit detailed consideration of this suggestion.

If the regional banks are well handled, they will husband their resources in ordinary times and will need to apply but seldom to the Federal Reserve Board for notes. The Federal Reserve Board will probably then have comparatively little to do. It will be an active force only if it should prove

necessary to restrain excessive expansion by the regional banks. To exercise a restraining influence over the regional banks is the primary function of the Federal Reserve Board and it should be clearly recognized that it is only in this direction that any considerable amount of power has been lodged with it. The large number of people who have become alarmed over the possible consequence of an unwise or incompetent Federal Reserve Board have in general totally misconceived the nature both of its functions and of its powers. It may fail to exercise much-needed restraint over the regional banks but, if that is needed, it will be owing to the selection of incompetent regional boards by the banks themselves. I repeat once more—if the regional banks, a majority of whose boards are chosen by member banks, are being wisely handled, it does not much matter what the character of the Federal Reserve Board may happen to be. The proper and only test to which the method of selecting the Federal Reserve Board itself should be subjected therefore, is this: Is this board, in part made up of officials chosen for other functions, entirely constituted by the President and a majority of it reconstituted at the beginning of every presidential term—is such a board likely to exercise that conserving and restraining influence which will be needed if regional banks themselves are being unwisely handled?

Looking toward the probabilities of the situation from the point of view which I have taken, it seems to me that the method of selecting the Federal Reserve Board is not entirely satisfactory. No board, however selected, should from time to time be subject to so great a change as is involved by the appointment of a majority of new men at one time. The board also has an unduly large proportion of government officials selected for other reasons. These objections to the provisions in the bill regarding the board do not touch the burning question or whether it should be appointed entirely by the President. It has been urged that the banks should be allowed to choose a minority of the members of the board. Personally I should be glad to see that concession made to banking opinion and believe that it would strengthen the

board, because the distinguished bankers who would doubtless be selected would be pretty certain to possess the necessary ability and experience—and what is of even more importance, would make the board a more conservative body than might otherwise prove to be the case. I do not, however, regard a change of this nature in the bill as vital; and further, it seems to be one which is beyond the range of practical possibilities. In all directions there is to be noted a strong drift of public sentiment toward public control, wherever large powers are exercised in the economic world. I question whether complete confidence and freedom from political attack could be secured for an institution lacking this feature of complete government control of the Federal Reserve Board. If the board acts wisely, that is all bankers require. This is not enough, however, to give that general confidence among the people which would free the system from the danger of persistent political attack.

It may reasonably be presumed that the boards of the federal reserve banks will be more conservative bodies than the Federal Board itself, because a majority of their membership will be selected by bankers, and because they will be directly responsible for the funds deposited with the regional banks by the government and by member banks. The Federal Reserve Board will be more susceptible to general public opinion, to which such valuable banking qualities as caution and conservatism do not make a strong appeal. On the other hand, the weight of responsibility resting upon the board may be expected to have not a little salutary restraining influence, especially if the bill is so changed that a majority of new members will never be appointed at any one time. Additional influence of conservative tendency upon the Federal Reserve Board may be exerted through another part of the proposed organization, the advisory council. This council, it must be admitted, does not promise to be a very efficient body if the provisions in the bill regarding it are not materially changed. Each federal bank board is to select a member representing its district to serve on the council. So far, the proposal seems entirely satisfactory, judged from the point of view taken in

this paper. It can hardly fail to be a body of conservative and experienced men. The council is to meet at stated intervals, four times a year, and may be called in special session by the Federal Reserve Board. The council may call for information from the board and formulate suggestions, and there its powers and duties end. It has no means of keeping in continuous touch with the Federal Reserve Board, and cannot assemble at the volition of its members, however desirable that might seem to be. It has no means of securing information except by formal application. Even with these very restricted powers and duties, the council might prove exceedingly helpful to the Federal Reserve Board, which can hardly fail to feel the limitations upon its knowledge of business and credit conditions throughout the entire country. The importance of the council can, however, be vastly increased without lessening the powers of the Federal Reserve Board, or going counter to the principles embodied in the measure.

In a paper on the bill of the National Monetary Commission, commenting upon the complete control of the National Reserve Association by bankers, I said:

> There seems to be a general tendency to attach undue importance to the question of the organization of the proposed bank; limited almost entirely to advances upon commercial paper, and working always very much in the public eye, there is little likelihood that under any form of organization its resources would be used for selfish purposes whether individual or sectional.[1]

The danger of selfish or sectional use of the funds of the regional banks is clearly reduced to a minimum under the form of organization proposed in the Glass-Owen bill. The danger is that these resources will not be used with caution and restraint. For this reason, I strongly believe that the advisory council should be made a more effective part of the organization. Its chairman, or in his absence its vice-chairman, should have the right to sit on the Federal Reserve Board, but without a vote. He would thus secure intimate knowledge of the grounds for the policies adopted by the

[1] *American Economic Review*, 1911, p. 263.

board, and if he possessed the added power of calling the council together at any time, that body would be able to make suggestions and formulate criticisms in season to be effective and of practical value.

This plan for a more effective advisory council is not based upon distrust of the intentions or character of the men who may be appointed to the Federal Reserve Board. It is urged in the belief that it will tend to make more effective conservative influence in the management of the federal reserve banking system, the vital necessity of which has been emphasized throughout this paper. This fear that the management may not, at least until after the consequences of its absence manifest themselves, exhibit sufficient caution and restraint in using their vast powers to extend credit, is not imaginary or fanciful. It is the inevitable conclusion which one must reach from an examination of many of the reasons which have been brought forward during the last few years to secure popular support for the method of banking reform exemplified both in the bill of the National Monetary Commission and in the Glass-Owen bill. Although I may seem to be going somewhat beyond the proper limits of my subject, I hope I may be pardoned if I indicate some few of the unfounded hopes which have been raised in the minds of the people during the discussion of the last few years—hopes which will make much trouble for those who may be entrusted with responsibility for the successful operation of the federal reserve banks.

The bill of the National Monetary Commission contained a provision requiring the National Reserve Association to discount at a uniform rate through the country. This requirement was contrary to sound banking principles and altogether impracticable in a country in which such diverse financial and economic conditions coëxist as in the United States. It is one of the most satisfactory results of the regional bank plan that this uniform rate ceases to be even politically necessary.

In urging the merits of both the Glass-Owen bill and that of the monetary commission, large claims which cannot possibly be realized have been made to the effect that if the

bill were enacted, rates for loans would be materially reduced and borrowers would secure largely increased accommodation. One well-known and enthusiastic advocate of the Glass-Owen bill, whose knowledge of law it is to be hoped is more profound than his understanding of banking principles, has been endeavoring to convince the public that the banks would borrow back the entire amount of their subscription to the capital of the federal reserve banks at the ridiculously low rate of two per cent, thus netting three per cent by this trick of legerdemain. Further, it is assumed by this plausible adherent of the measure that the banks will of course at once rediscount to the extent of two-thirds of their deposited reserves and of the government balances and at about the same rates; and then further rediscount still more, taking out the proceeds in the form of notes issued by the Federal Reserve Board. Unlimited credit expansion is here brought forward to secure the acceptance of a kind of banking institution the primary object of which must be to restrain credit excesses. This case is obviously extreme. Such influences certainly will not prevail in the management of the federal reserve banks, and in any event, banks will not be so foolish as to accept such lavish accommodation, even if it were available. This idea, however, that the federal reserve banks will be able vastly to increase the supply of credit is very generally held and is in itself sufficient to show the vital need that the management shall be in conservative hands.

Even in quarters where one might look for a clear insight into the fundamentals of credit and banking, a number of misconceptions are rife which if followed will inevitably involve the federal reserve banks in serious difficulties. That it is desirable that commercial paper should be made a more liquid asset than collateral loans is generally admitted. But it has been contended on all sides during the last few years that commercial paper was from its very nature liquid and further that credit could therefore safely be granted to an extent limited only by the amount of such commercial paper. Both of these contentions are hopelessly fallacious. No kind of loan is liquid to any considerable extent in an emergency.

You cannot suddenly deprive any kind of business of the amount of credit to which it has become adjusted. If the volume of business falls off, or if prices fall, the volume of loans can be easily reduced. It is indeed often said that loans based upon a commodity entering into general and necessary consumption can be quickly liquidated. This can be done as regards any particular loan, but supplies for the immediate and distant future must be in process of production and they will require a new batch of loans. If shoe factories shut down, of course no new loans are required, but the fundamental purpose of the bill before us is so to improve our banking machinery that this will not happen. Consequently, the volume of loans in that as well as in other lines of business will not be reduced except in consequence of lessened production due to other than credit influences.

The view that credit can be safely granted to the full extent of merchandise in process of distribution if not in process of manufacture is equally fallacious. Credit affects prices. Liberal discounts may cause speculative advances in commodity prices, stimulating excessive purchases by wholesalers, jobbers and retailers as well as by speculative holders pure and simple. There is no mechanical or statistical test of the amount of credit which may be safely granted whether the loans are commercial or collateral. Over-expansion is possible in both instances.

Again, it is argued by many that note issues if subject to regular redemption will automatically adjust themselves to business needs and be kept within entirely safe limits. Checks are certainly cleared with uniform regularity and yet on frequent occasions this has not prevented the over-expansion of deposit credit. Regular redemption or clearing does limit the process of expansion by a single bank. When all banks are expanding, however, such measures are absolutely ineffective. Nothing but restraint in granting loans can by any possibility check the expansion of credit in periods of active business and general optimism. To determine when such restraint is necesary requires the highest judgment, especially in a country in which gold exports are not and do not seem

likely to become in the near future a sensitive barometer of the business and credit situation.

This brings me to the last of the fallacies which seem to have become generally accepted in the course of the discussion of the last few years. It is the idea that by means of a broad discount market we should be able to secure abundant foreign funds in periods of financial strain. In the case of a small country, this view is entirely sound. It has proved, for example, quite feasible in the case of Belgium, where the National Bank of Belgium relies almost exclusively upon its holdings of Paris and London bills to meet requirements for cash. The larger the country and the greater the magnitude of its credit structure, the less the reliance that can be placed upon this resource. We do not wish, I presume, to become a sort of appendage of European financial centers and it would not be possible in any case. This has been to some extent of late the situation of Berlin with reference to London and Paris, but it is not considered to be a situation advantageous to the Fatherland. For a year or more now, the policy of the Reichsbank has been directed toward securing a larger gold reserve, one result of which will be to place the German banking structure upon a more independent footing. When we have sufficient capital to finance our own trade, domestic and foreign, and some of the trade of other countries in addition, then a considerable amount of foreign funds employed in our domestic short loan market will be entirely safe. This is the position of London, where a considerable amount of foreign funds are thus employed, but an amount which falls far short of the English capital employed in financing the trade of other nations. In any period of general liquidation, London can readily liquidate a sufficient amount of its funds thus employed to offset the withdrawal of foreign funds from the London market. Until we reach that enviable condition, we must maintain large gold reserves and should not rely upon the possibility of foreign borrowing as an important means of strengthening our financial machinery in emergencies.

CENTRALIZATION OF BANKING AND MOBILIZATION OF RESERVES[1]

ARTHUR REYNOLDS

President Des Moines National Bank

BANKING centralization may be discussed apart from all considerations of time and place, but as we are now considering the establishment of a partially centralized system of banking, we may most profitably concentrate attention on our own particular conditions.

As early in our history as 1791 Alexander Hamilton obtained from Congress after lengthy discussion legislation authorizing the foundation of what is now referred to as the First Bank of the United States. The Act of Congress approving the Second Bank of the United States was passed in 1816; the charter was not renewed on expiration, and after operating for some time under a charter from the state of Pennsylvania, the bank liquidated in 1841.

The government owned one-fifth of the stock of these banks, and while they were organized as public institutions, their main purpose seems to have been that of gain, as the government itself realized fifty-seven per cent profits in eleven years on its stock in the first bank.

In both of these instances, inherent weaknesses incident to the organization were the cause of ultimate dissolution. In the case of the first bank, personal differences and disagreements about federal patronage brought the question of renewing the charter into politics. In the second, rivalry in the matter of note issues between the bank and the state banks, who had retained their right to issue notes, led to retaliatory methods in some of the states, which taxed the circulation and endeavored by other means to hamper the operation of the Bank of the United States. Under this pressure, in 1829,

[1] Read at the meeting of the Academy of Political Science, October 14, 1913.

President Jackson inaugurated a political campaign against the bank which eventually forced it out of existence. Neither of these banks represents centralized banking as understood to-day, and any bank organized upon such a plan as they were would fail to meet present requirements.

Centralization of reserves plus the delegation of credit control to a central organization, according to the experience of other nations, and even according to the consensus of opinion here, seems to be necessary to any plan which shall meet the approval of the people and at the same time accomplish the desired economic end.

The mere formation of an institution with immense capital and authority to hold the reserves will accomplish centralization and concentration. In a way, indeed, we have this in our present system; but instead of considering it a benefit, we complain of it as an abuse and a disturbing factor. This suggests the error in present popular conceptions relative to a central bank. The people regard the main feature of such an institution as purely centralization and therefore they fear its power, whereas, when properly organized and administered, its main feature is responsibility and disinterested public service. This fact is clearly shown by experience in other countries extending over a long term of years.

In this view, centralization, in order to be effective, must present possibilities of more disinterested public service than does the present administration of the banking business in the central reserve cities of the country. In every system recently proposed, the limitation of profit to be distributed to the stockholders of such an association has been tacitly admitted. When that point of distribution has been reached, profit should become secondary to scientific administration to accomplish the purposes of organization.

The hope of some, that our present system could by some changes be reinforced to withstand the pressure to which it is periodically subjected, has gradually been dispelled by broader knowledge. We now see the necessity of centralizing the power of our present ineffectual units in an association whose principal object shall be service to its constituent parts

and the general business of the country rather than gain in dollars and cents. With salaried, competent men having no pecuniary interests as stockholders, the incentive of profit, which in most business is the motive of action, would give way to a feeling of responsibility and disinterested service.

An association such as this could exist in this country only through the coöperation of the government and the banks. In that form, free of political or interested individual control, its functions would embrace the conservation and distribution of credit through concentration and control of the reserve money of the country, and in this sphere it would be effective as a preventive of stringency and disaster.

No more effective argument in favor of the proper centralization of banking power through coöperation can be urged than the beneficial action in various emergencies of the clearing house associations, representing in each instance the centralized power and credit of the members composing them. The government in its proposed plan recognizes the necessity of this coöperation, and endeavors to compel a large number of the banks of the country, under penalty of dissolution of their charters, to join in organizing the proposed system. Though the doctrine of centralization is accepted in part, however, the benefits to be derived from its accomplishment are illogically destroyed by diffusing the power into twelve separate associations.

The weakness of our present system has many times been charged to the want of concerted action among so many isolated banks, each striving to care for its own interest without regard to the common good. If this want of unity has proved a defect in the past, what good reason can be adduced for the establishment of twelve competing banks, only partially concentrating capital and reserves, when a single institution would furnish greater stability in a more economical manner?

A centralized association organized on the theory herein set forth would be a bank for banks and for the government. In the latter capacity it would relieve the finances of the country from the alternate expansion and contraction now resulting from the government's operations in collecting its

income and disbursing its funds. These operations, bearing only a slight relation to business itself, have long been recognized as a disturbing factor in our business, and by reason of them the Secretary of the Treasury has frequently been called upon to constitute himself the arbiter of credit extension to the business interests of the country by relieving stress through deposits of government funds.

In addition to this, such an association, not being conducted primarily for profit, would be differently situated than any other bank, and hence could carry at all times a large amount of cash on hand for the assistance of its member banks. This feature in itself would have a steadying influence upon business, and assist in maintaining confidence.

But the functions of such an organization would be of more importance to the business of the country as a regulator of credit extension than in any other capacity, as it would have at its command the means of checking over-expansion of credit in easy times by the sale in the open market of foreign bills of exchange, or even by borrowing funds in that market, and thus accumulating cash on hand for use when the situation was reversed. In addition to this, it would have at command the more powerful means of raising or lowering the rate of discount to meet varying conditions, and it must be noted that this method is not an experimental one, but has been in effective use elsewhere for more than a century.

Its ability to serve its stockholder banks by rediscounting their good available assets would furnish them a market for such form of credit in case of need. By the issue of its circulating notes it would be enabled to expand credit whenever that course was desirable, and through its relations with its constituent banks, when necessary, it could compel a contraction of that credit by forcing the retirement of the notes. It will be observed that the exercise of the two functions last named would enable it to introduce into our circulating medium that elasticity long considered desirable.

From the intimate relations that such an association would establish with its component members, it would always have the means of information concerning conditions in all parts

of the country. Such information would serve as a basis for the actual administration of its policies.

The scattering of the reserves under our banking system among 29,000 banks is a violation of a principle adopted by every great system of banking in the world and is recognized as our principal source of weakness. In other countries, reserves are accumulated and concentrated in institutions organized for that purpose. When a scarcity of money occurs through over-expansion or otherwise, the central bank exerts its power and maintains business by mobilizing the reserves to aid in liberal credit extensions and by promoting confidence in the general situation. Other countries are able also to build up their reserves by raising the discount rates, which invites a flow of gold to the point in need of it. The reverse is true under our method of handling the reserves, for upon the first intimation of stringency, reserves which have accumulated in money centers are withdrawn and hoarded.

The system we have has proved satisfactory in fair weather. In ordinary times, the farmer, merchant or manufacturer can go to the bank with reasonable assurance that his requirements will be met; but when clouds gather the public, remembering the experiences of 1873, 1893 and 1907, begin to question their ability to secure credit and even money itself. Banks seek to replenish their reserves, which can be done only by decreasing the reserves of other banks, which are themselves endeavoring to strengthen their position by securing a greater amount of reserve money. Banks begin to call loans in an effort to build up their reserve. A general scramble is on between the people and the banks, and among the banks themselves, in an effort for self-protection, each struggling for a stronger position, which resembles the mad rush for safety at the theater where the cry of "Fire!" has been heard. Then we realize that the reserves of the country ought not to be scattered among 29,000 banks, forbidden by law from using their reserves to extend credits. The reserve, which by its very nature should be a bulwark in time of need, becomes useless for the purpose for which it was intended. What we need and must have is a more flexible condition, for

such disturbances as outlined almost invariably occur in seasons following our greatest prosperity. The farmer and merchant must know that they can secure such accommodations as they may need at all times, based, of course, upon the products of the country. Banks must be in a position to loan freely and pay out money freely. To be compelled to contract or call loans at the very time when loans should be made brings about the condition we seek to prevent.

What we need, then, is a centralized reserve agency, separated and made distinct from the interests now controlling the large amounts of capital and reserves, through which agency credit may be extended at all times when required by the necessities of business. This can be accomplished only by massing such a proportion of our reserves in a central institution as will always provide a market for the paper represented by commercial transactions.

The gold reserve of any country, whether its banking system is reinforced by a large central institution or is based upon the scattered reserves as under our custom, is ultimately the basis upon which credit is extended, and hence the foundation upon which the stability of business rests. We have gold enough in this country to establish the proper basis for credit and at the same time to meet the need for cash. The banking business is a credit business, hence the element of confidence is an important one. The business of the banker is to accept deposits and loan money; both of these functions are required in every community. It is not the banker's fault if his depositors all seek to obtain their money at the same time out of the reasonable course of business; nor has the public any reason to anticipate that all loans must be paid at one time to meet such demand of depositors. Hence the element of confidence must play an important part in every banking system in the world.

The secret of a proper banking system is to use the least possible cash and the greatest amount of credit which will provide a safe method of transacting business with the public. Other countries extend in the aggregate larger credits on a smaller proportionate basic gold reserve than we, owing to

the fact that this reserve in their cases is massed and controlled as a whole. Herein lies the secret of the confidence of the people of those countries in banking so conducted.

In times of need, it is demonstrated that banks in other countries pay out their cash to aid their customers and prevent trouble while banks here call loans to benefit their own situation. Their experience has been different from ours, and they have acquired this confidence because their central banks continually ward off disturbances by precautionary measures, while we, acting as separate units of an equally great whole, have no guiding hand to bring into harmonious action the same or greater resources.

The conduct and methods of these great central institutions may be compared to those of a vessel anticipating a storm and approaching the rocks and the shoals. The prudent captain throws out his anchor and remains in the open against the time when the storm may come. His ability to protect what is entrusted to him lies not so much in what he may be able to do when driven ashore as in the safety he seeks before that dread event happens. We, on the contrary, are at sea without anchor, and as the increasing gale carries us inshore, each man naturally makes a mad effort to save himself.

It may be said that there is, under our present system, a way open to the bank needing assistance by the rediscount of its negotiable assets, but the general situation is not helped by this process, for the bank which increases its reserve, and hence its ability to pay out cash or extend credit, does so only at the expense of the bank extending the accommodation, and when all are called on at the same time, the impossibility of all being assisted is at once apparent. With New York banks carrying net deposits from banks of about $500,000,000, it will be seen that we have at the present time a mobilization of our reserves, but in privately controlled banks subject at all times to their own selfish interests. When it is known that in ordinary times about one-third of all the money in the banks in the country is held in the vaults of the New York banks, with very little regulation or restriction, it must be admitted that our present system of banking under the na-

tional bank act tends toward concentration and centralization as well as individual control and power. The vast sum of money held in New York would, if properly regulated, afford a reserve sufficient for our banking system, and is a larger amount than is found necessary to cover the requirements of the Bank of England in its world-wide operations.

There is at present no coöperation between the great number of medium-sized banks of the country to maintain the source of credit, no agreement in case of trouble. The result is that when they should stand united, the effort for self-preservation makes their interests antagonistic.

The difficulty of the situation which at present confronts us arises from the fact that the accumulation of our reserves in the central reserve cities, more or less under individual control, is caused by the regular and ordinary course of business, and the law under which the national banks hold their reserve makes their concentration in this way not only possible but legal. Under present conditions of competition for business it is unprofitable for the banks at central reserve points to hold idle from one season to another even a small proportion of the loanable part of this vast amount of capital. In this connection, it must be remembered that under the statutory reserve requirement one-fourth must remain idle in the form of lawful money. Banking to be continuous and safe must be profitable, and the banker naturally seeks an investment which brings a profit in interest.

Foreign systems of banking provide for massing of reserves with the central banks and the purchase of paper of international character based on products soon to be consumed, which can be sold at all times and bring in gold against which commercial credits can be extended to meet the requirements of banks, thereby creating a liquid money market. We do not have such a liquid money market in this country, the nearest approach being the loan made upon stock-exchange securities. In ordinary times, such securities can be readily converted into cash, and hence in times when money is easy, usually in midsummer, such loans attract much of the surplus reserve arising in reserve centers from commercial deposits.

However, when depression occurs and large numbers of individuals seek to transform bank credits into cash at the same time, loans made on stock-exchange securities can not be collected because the securities cannot be sold. Then we have a collapse of our reserve system and trouble comes.

If, now, a centralized agency were established, it would represent the united coöperation of all the banks of the country; it would prevent the accumulation of the reserve money of the country in the reserve cities; it would open a market for the handling of the foreign bill of exchange; it would be an agency through which the credits of the banks could be utilized when emergency threatened, without awaiting its actual arrival, and the concentration of reserves, now a menace to business, would come to be regarded as a safeguard for the commercial interests of the country.

We must, then, have such concentration and mobilization of reserves as will accrue with equal benefits to all the banks of the country. Every banking system in the world demonstrates the necessity of concentration in some central place where all may be served in an effective and scientific manner.

MEMBERSHIP AND CONTROL OF THE PROPOSED FEDERAL RESERVE BANK SYSTEM [1]

ALEXANDER D. NOYES

Financial Editor, New York Evening Post

THE resolutions at last week's bankers' convention at Boston have directed attention to two special points of controversy over the pending banking bill, and to these I shall limit what little I have to say. They are the creation of compulsory membership of banks in the new system, with compulsory subscription by such banks to the stock of the regional reserve banks, and the question of membership in the national board of supervision. The first of these questions, in my judgment, is of less vital consideration than might at first glance be supposed. In principle the banks have a strong argument against it, on the ground clearly set forth by Mr. Hepburn this afternoon, that such compulsion amounts to violation of their charter rights. But compulsion in the matter is scarcely necessary to the government's plan.

A national bank, even as the bill now stands, may refuse to participate and may surrender its national charter. If it be said that this would leave the bank to deal with the problem of its holdings of United States bonds, which would still be left upon its hands, even so the situation would still differ only in degree from the situation created by the Aldrich plan in regard to banks which should elect not to participate in subscription to the central institution provided by that plan. The Aldrich plan did not make the subscription compulsory upon the bankers, but that plan restricted to banks in the membership the advantages of the provisions whereby bond holdings of such banks would be cared for through the medium of the central reserve bank. Under the system proposed, it is plain that these bond holdings ought to be

[1] Discussion at the meeting of the Academy of Political Science, October 14, 1913.

absolutely protected in one form or another, and it is perfectly feasible that some such provision should be made by the government. It will probably have to be, however, a wide and far-reaching provision. The condition of the bond market at the present time is a matter of interest to the government in other directions quite as immediately as through its concern in the success of the new banking system.

As regards the second point of controversy, that of membership in the national board, there is this much to be observed: both parties to the controversy want to accomplish the same thing, namely, to concentrate reserves, to furnish a broad field for rediscount, to relieve the extreme pressure on the money market in the active seasons of the year and deal promptly and effectively with financial crises, and to provide facilities for a bank currency sound and universally acceptable, capable of expanding when expansion of the medium of exchange is required by trade activity, and of contracting when such trade requirements are at an end. On the essential points of the banking plan there is substantial agreement between the government and the bankers, but each side particularly mistrusts one thing in the general position of the other side, as we have plainly seen through the discussion this afternoon. Each side expressly mistrusts one consideration, one fact, in the position of the other side. Congress looks with special disfavor on any proposition which would seem to facilitate the use of the new banking system and its control by any small body of powerful banking interests, and the bankers mistrust any proposition which would appear to facilitate the use of the system in the interest of politics. The apprehension of each may be exaggerated, but the apprehensions of neither can be considered groundless.

Now the plan of the House of Representatives unquestionably allays misgivings regarding possible selfish domination by banking interests. The national board is to be made up exclusively of political appointees, only one of them being required by law to be a trained banker. There can be little reason, under such provisions of the law, to apprehend bank-

ing domination: but in achieving this end, the question is certainly left open, whether the proposed arrangement may not have gone to the other extreme and opened the door to possible political influences, to political domination. This under certain circumstances might be equally michievous. The episode of Jackson and the United States Bank is the classic case cited to prove and explain the feeling of the general public against banking domination by a central bank. Not much attention is always given to the other side of that episode, which illustrates equally well the opposite danger of political influence.

From a very high authority on the history of that period I will read the following description of what happened after the Jackson administration had assumed control of certain disputed ground in the banking situation:

> The pet banks, as they were promptly dubbed, to which the deposits of the government had been transferred, were selected upon party principles—were one and all Democratic banks in the South and West, whose directors were of the President's party. * * * This, that, or the other influence of interest or persuasion obtained the patronage of the government for banks not at first favored with a place on the list.

This extract, which is from the *History of the American People*, by Woodrow Wilson, does not by any means prove that the same condition is likely to occur to-day. Exactly the same situation could not possibly recur under the bill as it now stands, but there are certain possibilities in the longer career of a system of this sort which it is only fair to keep in view—notably the conceivable yielding by the central board to political pressure from a certain section, rather than from a given party. This danger still exists; to resist it the national board will require the greatest expert wisdom in the exercise of its large powers, especially in times of emergency. We have felt the operation of this force, sometimes sectionally, sometimes in moments of excitement; and it has exerted influence on everyone, especially in the last two decades.

How can this at least conceivable danger be best avoided

in the bill now before the country, supposing it is to be submitted to amendment? Several suggestions have been made. Some say, deprive the national board of the large powers which the government confers upon it regarding rediscounts, the fixing of bank rates and the suspension of reserve requirements for individual banks. A little reflection upon the bill will convince us that the very nature of the system and the existence of regional banks require the existence of some central power to be used in times of emergency in order to insure the harmonious action of the system.

Another suggestion is to abandon the regional bank idea and return to the Aldrich plan of one central institution. If you will reflect a moment, it seems to me that you will reach, as I have reached, the conclusion that this would solve nothing at all, but would only increase the precise difficulty before us, since the national board would then be the directorate of a central bank, conducting and directing all the operations of the system, a duty which now rests primarily in the hands of the regional banks, of the members of whose boards the bankers select the majority. It is scarcely to be supposed that if the powers of the national board were to be thus extended, Congress would be any less strict in the selection of the board (which would then be the directorate of the central bank) or any more inclined to grant a controlling influence on that board to the banking interests; for the board would then control the whole country and would itself conduct all the operations of the system, operations which are now under the law to be made compulsory. With the power now largely in the hands of the regional banks, where the bankers select the majority of the boards, it seems to me that it would be a step from the frying pan into the fire to adopt the proposed expedient.

Then there is the plan proposed in the Boston resolutions of last week; a minority representation in the national board, to be chosen by the regional banks. For this plan there is undoubtedly much to say. It would insure competent discussion before any important action by the board was taken; yet after all, a minority would be a minority, and it is ques-

tionable whether the constant presence in the board of a minority that only the turn of circumstances could convert into a majority would be wholly happy in its results, and beyond this, it is yet to be seen how far Congress will be willing to yield its general theory that the supervisory power at large should be exercised wholly by the government.

There is one possible change of plan, with which I will close, and which I think has not received the attention it deserves. Provision is already made in the bill for an advisory council, to be chosen by the regional banks and to consist of one member for each regional bank, which council shall have power to offer advice or counsel to the national board at any time. Its function is limited, as Mr. Sprague has explained to you. It may call for information, may procure advice or information, and yet no powers distinct or decisive are conferred upon this council. The paragraph creating this advisory council was stricken out in the Boston resolutions. I cannot help thinking that this action was a mistake. The real problem of the national board, in my opinion, is not so much the composition and membership of the board as the absence of proper restriction on the exercise of its large and sweeping powers, powers the mistaken exercise of which at a time of financial crisis might do unlimited harm. In this regard the practise of the Imperial Bank of Germany is extremely interesting, especially in view of the fact that in Germany also there is provided a directorate for the central bank made up wholly of political appointees. There, too, is an advisory council, known as the *Central Ausschuss*, consisting of fifteen members who are chosen by the shareholders of the central bank. The fifteen regularly appoint a sub-committee of three, which sub-committee meets each week with the president and directors of the bank to discuss policies with regard to questions that may come up. The testimony of the vice-president of the Reichsbank before the Aldrich committee stated that in practise their advice is generally carefully considered and taken. They have also certain direct veto powers. It appears to me that the development of an advisory council along these lines, where we have already a model before us, or at

any rate a distinct suggestion in the practise of the Bank of Germany, might solve what promises to be in other respects a deadlock between the bankers and the government. Effectively carried out, it would transform this central supervisory council, possessing merely the right of casual inquiry or suggestion, into a body whose voice must necessarily be heard before any general action of the executive board is taken.

THE ECONOMISTS AND THE OWEN-GLASS BILL[1]

EDWIN R. A. SELIGMAN

McVickar Professor of Political Economy and Finance, Columbia University

I NEED not emphasize the fact that this meeting is one of uncommon significance, inasmuch as it brings to the front the fact of the fruitful union of practise and theory. We have before us in the audience to-day not only representatives of those specially interested,—the bankers themselves—but also, in addition to the general public, the thinkers or the theorists who have made a specialty of this topic. If we look at the situation as it existed in similar critical times abroad, we shall find that the best legislation on this question, as well as on many others, has been achieved by this combination of the practical man and the theorist. When the celebrated Peel's Bank Act was passed in England, it was primarily the thinkers of the day who, in combination with the great bankers, succeeded in persuading the government that the welfare of the public would be best served by the adoption of their theory. When, after the Franco-Prussian War the German system was reorganized, and the Reichsbank was initiated, it was again the thinkers, the professors, the publicists, who outlined the scheme in conjunction with the great business interests of Germany, and it was their recommendation which prevailed in the formulation of the new law. So again in France, when, as you remember, there had been for years a heated discussion on the very points about which we are talking to-day,—it was there again the university professors who acted in unison with the great bankers and influenced the government to wise action. In every one of these cases what was done has been permanent. It came to stay. Why? Because there was no mistake in principle; because

[1] Introductory address as presiding officer at the meeting of the Academy of Political Science, October 15, 1913.

the theory as it was elaborated by the thinkers and tested by the practical men proved to be a sound theory. That is why Germany, France and England have been a generation ahead of us, and why they are to-day far in advance of us. Therefore we welcome this meeting to-day because it brings—perhaps I would not say for the first time—but, at all events, in a significant way to the front, this combination of sound theory and of practise which must unite in order to achieve anything permanent.

I am sure that we all recognize the skill, the assiduity and the patriotism with which the framers of this bill have been working in Congress and doing their utmost to bring about a bill which should meet these two requirements — which should be in harmony with sound theory, and should at the same time recognize the well-considered interests—not the private, but the public interests of the bankers. At the same time we cannot refrain from expressing a word of regret that in this country alone among all the great countries of the world which have attempted to solve this problem, the question should be approached not from the point of view of the interests of the whole country, but rather from that of the interests of a political party. It makes no difference whether we have the one party or the other party, but what we have not been able to accomplish has been to rise above party, as England did, as Germany did, as France did, and to come together on a theory which would appeal to everyone in the interests of the whole country.

That leads me to call attention to a remark in one of the papers or addresses that you heard yesterday, which I am bound to say was, I think, unfortunate. It was there stated by one of the distinguished leaders in our legislative halls that the real opposition to this bill came from the bankers because their profits were threatened. That seems to me to be both an ungenerous and an inaccurate statement. I for one do not believe it is true. I believe that the heads of our banks, large as well as small, are not actuated simply by their own self-interest and the thought of profit. More and more the big men of this country are realizing that they occupy

positions of trusteeship, and I should be very sorry to believe that the gentlemen among whom I number acquaintances and friends should be so lacking in patriotism and in public spirit as to base their criticisms upon the narrow ground of their own immediate interests.

This brings me to the last thought which I venture to express to-day. Ably as the preparation has been made, admirable as are many of the provisions of this bill, excellent as has been the coöperation of the various committees with the men best competent to judge, and welcome as is the acceptance of some of the teachings of science on this subject—granting all that, I still must voice in the name of the Academy of Political Science and in the name of the guild of scientists and economists, whom, I think, in this respect I have the right to represent—I must voice my very pronounced disappointment that in some of the fundamental features of this bill there has been no attempt made to follow the teachings of sound theory. In England, Germany and France there was not a single departure in any fundamental point from the teachings of sound theory; but in this bill what do we find? Passing over a number of minor points which this would not be the place to discuss, because of lack of time, I shall simply call attention to the fundamental fact that the proposition of twelve regional reserve banks flies in the face of all sound theory. I venture to assert without fear of contradiction that if the economists and the thinkers of this country were called together in conclave to-day, there would scarcely be a dissenting voice on this point, and there would certainly be an overwhelming majority to the effect that this proposition—the fundamental proposition, in most respects, of the bill—is incorrect, and if persisted in will make the whole measure either a failure, or, at all events, very largely impotent to bring about the results which we all desire. To go into the details is not my function to-day. But it is proper to voice this sentiment, that the sound opinion of the expert theorist in this country is in this respect in harmony with the expressed opinion of the bankers, and that if you accuse the bankers of opposition because of a threatened loss of profits, you cannot accuse the professors

or the theorists of any such shortcoming. It is indeed true that we heard only the other day that the professors or thinkers are the minions of capital and represent the capitalists. That is an old tale, an accusation to which we have been accustomed for many a year from the socialists. But, on the other hand, we are in the fortunate position of being attacked equally from the other side, and of being declared by many a narrow-minded practical man to be socialists and to represent only the one side, that of labor. I think, therefore, that we have nothing to fear in this respect of partisanship and when we say, as we do, that this bill sins in a glaring way against some of the fundamental tenets of economic science and of experience, we have a right to hope that in this country also, as in England, in Germany, and in France, the warning will not go unheeded.

DISCUSSION OF THE FEDERAL RESERVE BANK PLAN

MR. N. JOHANNSEN:

According to the bill now pending the national banks will be compelled to make large payments to the federal banks, amounting to 461 millions, whereas they have only 133 millions to spare, and no possibility of obtaining the deficiency of 328 millions except by borrowing it from the federal banks by rediscounting commercial paper. The loss of interest caused thereby may seem to be a single expense and evidently is being considered so by all concerned; but as a matter of fact this expense will constantly repeat itself, involving an annual loss of 13 millions to the national banks, figuring the discount at 4%.

On June 4 the national banks held deposits amounting to 7124 millions, and against this a legal reserve of 1420 millions, consisting of 877 millions in cash and 543 millions in the shape of deposits with reserve banks. According to the new bill the legal reserve required will be reduced from 1420 to 1065 millions; but this latter amount must be kept all in cash (either in the banks' own vaults, or in the vaults of the new federal banks), whereas they have only the above amount of 877 millions to spare for reserve purposes, making a shortage of 188 millions. To this must be added 35 millions, consisting of cash in the redemption fund, which the banks will not be allowed to figure as cash assets any longer (though really consisting of cash); also 105 millions which they are required to contribute as capital fund to the federal banks—making a total deficiency of 328 millions.

This is not 328 millions of mere capital—which the banks might arrange for by means of their credit facilities—it is 328 millions actual cash. Can they draw this amount out of the country's money supply? No; this money supply is all absorbed, partly in the circulation, partly as reserve in the financial institutions.

How is it proposed that the banks shall raise the money to pay their assessments to the federal banks? By rediscounting commercial paper with the latter! The federal banks, instead of first providing a cash basis on which to start the issuing of credits, are

to issue their credits on the basis of credits—the old fundamental error of the Aldrich bill.

If the national banks could keep those 328 millions of commercial paper in their own possession they would, as the paper gradually matures, obtain the funds for making further loans to their customers and keep up the business; but if they want to continue in business, they must borrow the money they need from the federal bank by rediscounts and must keep on doing so right along, to the extent of 328 millions, to recover the money they now have. This constant rediscounting, to that large amount, will entail a steadily recurring loss to the national banks, in the shape of interest, of about 13 millions per annum.

MR. GEORGE B. MORLEY:

As a country banker, I should like to ask according to what precedent it is proposed to allow the government to issue the notes instead of the banks? Is there any large civilized country to-day, with a Congress such as the United States has, where the government issues the notes instead of the banks? If the banks should issue the notes under government control, would not that mobilize the currency of the country and adapt it to the wants of the people?

MR. VINCENT:

I should like to ask Mr. Noyes a question. What would be the effect upon the assets of the national banks if they decided not to go into the federal reserve banks? They would have to close their doors as national banks and retire their circulation. I should really like to know how much it would cost a bank to go out of the business.

MR. NOYES:

The answer to that question depends upon two points. First, if the bank elects to sell its bonds, how rapidly can it sell them? Next, what is the market price for the bonds?

MR. VINCENT:

We will assume that a bank wanted to dispose of all of its bonds at one time and go out of business as a national bank.

MR. NOYES:

The cost to it would depend upon how many other banks might desire to go out of business at the same moment, which would of course have a considerable effect on the market.

MR. VINCENT:

If many of them wanted to go out, it would cause a fall in the price of the bonds?

MR. NOYES:

Yes, of course.

A VOICE:

That is the club which the government holds over the banks to drive them into the federal banks. The banks have the bonds, and have paid their money for them. They cannot dispose of those bonds except at a loss, and naturally they do not want to suffer that loss. So the government virtually says to them, "You go in or you lose your money."

THE REDISCOUNT FUNCTIONS OF THE REGIONAL BANKS[1]

FRANK A. VANDERLIP

President, National City Bank

WE heard Chairman Owen say yesterday that among other things it will be the function of the twelve regional banks proposed to be established by the bill which bears his name to loan to member banks, through rediscounting for them. Not sometimes, but always and under all circumstances, we are told, the member banks will be able to rediscount at the federal reserve bank. That is a very alluring proposition to a banker. A banker who can look into the future and know with absolute certainty that under any circumstances, he can rediscount commercial paper in his portfolio will have removed from his life a good deal of fear. If this measure will do that, do it continually, persistently, it is a marvel that any banker is opposed to it, because the advantage accruing would certainly be very great.

Let us see what it means. It means that commercial paper will become the most liquid asset in the bank's portfolio. According to the practise of American banks, a loan once made to a commercial borrower must remain in a bank's portfolio until the loan matures. The exception to that is in the case of country banks which may rediscount to a limited extent with their city correspondents; but the large banks cannot rediscount. Not only is there no place for them to go, but it would be considered an exhibition of weakness. Hence a loan made to a commercial borrower by a large bank is a complete absorption of that portion of the bank's loanable funds until the maturity of the loan. If banks in the future, under this measure, can always borrow, then the type of commercial

[1] Address at the meeting of the Academy of Political Science, October 15, 1913.

paper that the bill permits as collateral for such loans becomes the most liquid asset that the bank could have.

Another result will however come from this. At the present time, as I have said, a loan must be held until maturity. One of the great needs of this country is a discount market, a market in which we can buy and sell commercial paper that has been endorsed by banks, so that the credit of the original maker is not taken much into consideration. We need to create a situation so that banks will buy and sell commercial paper in that market; so that they may buy one day and perhaps sell another day soon after, as we now make call loans one day and possibly call them the next day if our position changes. The existence of a discount market of that character would, I believe, be of the utmost importance to commerce as well as to the banks of the country. It is impossible to have such a discount market here without a central bank fully qualified to meet the responsibility that a central bank should bear; that is to say, in the last resort to rediscount commercial paper. We are willing to invest our funds in commercial paper under that condition. If we know that when we need partially to liquidate our portfolio, and the market will not repurchase commercial paper, we can go to the central bank and have that paper rediscounted, we can then afford to buy it. It is the ability to go ultimately to the central bank for discounts that will create the discount market.

The advantage of a discount market will be that we shall no longer have to keep a great amount of funds in call loans based on stock-exchange collateral. With a minimum reserve fixed by law, all banks naturally run pretty close to that minimum. This means that they must have some part of their loanable funds in a form in which they can readily convert them into cash; that is what we call the line of secondary reserve. To-day we are forced to carry this line of secondary reserve in loans upon stock-exchange collateral, because that is the only type of loan which is immediately convertible into cash. That type of loan is all right in ordinary times, because it is immediately conver-

tible into cash. It is however exactly the opposite of the ideal bank loan in that it has no self-liquidating quality. The only way the loan can be paid is by shifting it, either directly or through the sale of the collateral. There is no self-liquidating quality about it, and while it is satisfactory in ordinary times, it is full of the gravest danger at a time when it becomes impossible to shift it. If we rediscount commercial paper in the way Senator Owen has outlined, we shall no longer feel under the necessity of carrying large amounts of stock loans; there would be liberated for commercial uses here in New York several hundred millions of dollars. Money now devoted to stock loans belongs to the loanable funds of both New York and out-of-town banks, for many out-of-town banks come into our call-loan market, their loans reaching two or three hundred millions.

A discount market will at times attract foreign capital, because it will create paper of a form suitable for the use of foreign banks. At present there is practically no loaning of foreign capital on American commercial paper.

That it is very desirable to create a central bank or banks that will have the power always to loan to member banks, is obvious. If this measure will accomplish it, it will bring lower commercial rates for the whole business community of the United States. It will accomplish a leveling process; rates will go up somewhat in the cities and down in the country districts; that is to say, there will no longer be the funds devoted to the very low rate stock-exchange loans that we now have, and those funds, going into commercial borrowing, will tend to lower the general level of the commercial rate. It will become easier to transfer funds from one community where there is an overflow of loanable funds to another where there is strain. All these results would be accomplished, not because banks would continuously go to these central banks and borrow money, but because they would have a place to which they could go as a last resort. They would not want to go there normally; they would not expect to borrow money at a low rate from the central banks and re-loan it at a higher rate; but the ability, in the last resort, to go there,

would give a liquid character to commercial loans, and that liquid character would bring the improvements that I have outlined.

So much for the theory. Does the bill meet the specifications? Are the principles that must be involved in legislation to accomplish this thing in regard to rediscounts, embodied in this bill? I do not believe they are. You have already heard something in regard to the twelve regional banks. I think no clear-minded student of this subject can possibly arrive at any other conclusion than that you must have in effect a single central reservoir. You may have twelve regional banks that are so piped together with a force pump, as Senator Owen said yesterday, that in effect they become a central reservoir. But that is the thing we must have — a single central reservoir, whether we get it through twelve or four piped together, or whether Congress does what the best minds there must know they ought to do, were it not for a party platform, and give us a single central bank.

There are other defects in this bill which I want to refer to only in the briefest way, because my attention is to be directed simply to the rediscount portion of the measure; there are however other defects in the bill which would prevent the banks from being able to meet their full responsibility for rediscounts. I think perhaps the most important of these other defects is the character of the note issue, to say nothing of the absolute unwisdom of having these notes issued by the government and of involving the credit of the government unnecessarily. I do not believe that the note issue as planned will, for a good many years at least, give an elastic quality to our currency. We have to-day ample currency for normal times. The creation of a new note issue of elastic quality will not give elasticity to the total volume of our currency, unless we retire a sufficient amount of the existing volume to give play to the elasticity of the new issue. I believe that at least half of the present bond-secured national bank notes should be retired if we are to give by this new note issue a truly elastic character to the whole body of currency, and an elastic note issue is an essential if the central bank is properly to discharge its rediscount responsibilities.

I doubt the wisdom of the present plan of forming the Federal Reserve Board. Powers are given to that board which are obnoxious. The particularly obnoxious part, the power that nearly all bankers object to, is, I believe, an absolutely necessary one, if we are to persist in the error of having more than one federal reserve bank. Bankers object to the power given the Federal Reserve Board to compel one federal reserve bank to loan to another. Here is a body of men having no financial relation to the capital of the bank, who have the power to compel one bank to make a loan to another bank. That is obnoxious; it is against all our ideas of a proper safeguarding of credit; but it is absolutely essential if we are to have in effect one reserve reservoir. If you have twelve regional banks you must bring about this one reservoir by piping these banks together, and to do that you must give to the Federal Reserve Board power to compel loans. Whether or not banks will accept a plan which puts this power, both obnoxious and necessary, into the hands of such a political board, remains to be seen. It cannot be a success without the coöperation of the banks. Not only must enough banks go into the system so as not to destroy the present national system, and give a sufficient membership to lend character and standing to the new scheme, but they must go into it with some fair idea that it will be a success, not with the temper of mind that will lead them to run at the very first indication of anything going wrong with the system.

It would take me too long to go into the details of my various objections to the bill, and I do not want to give you an idea that I object to it *in toto*. As a matter of fact, I am extremely favorable to about eighty per cent of it. I believe it is of the utmost importance to the country—more important to borrowers and laborers than to bankers—to have some correct legislation. I think the principles have been pretty well understood by the framers of this bill. I think in the main they have followed them, but not followed them to a conclusion. They have recognized the need of a central reserve reservoir and have given us twelve reservoirs with a forced joining together. They have recognized the desir-

ability of a bank-note issue and have given us a federal note issue to be loaned to the banks. I think the bill can be amended so that it will accomplish the thing that Senator Owen said a central bank ought to accomplish,—the creation of a bank or banks that can always discount for the member banks. As the measure stands this will not be accomplished.

It provides that ninety-day paper, created in commercial operations, shall be the basis of this rediscount. This I believe is a correct provision. Under certain favorable conditions of the reserve held by the federal reserve bank, one hundred and twenty day paper may be rediscounted, and permission is given to rediscount one hundred and twenty day paper up to fifty per cent of the paper so rediscounted. This percentage is too high. Not over twenty-five per cent, at most, of the paper in a bank's portfolio should be one hundred and twenty day paper.

The exclusion of stock-exchange loans from rediscount is an absolutely correct principle. If bankers were selfish, if they were looking at this thing from the point of view of profit rather than from the standpoint of correct economic principles, they would not say that; but I believe bankers almost universally recognize that it is only loans of the self-liquidating character that may properly go into the portfolio.

There is embodied in the bill a clearing-house scheme which I believe can be made of enormous importance. It is the cause of objection on the part of some country bankers. I think possibly the charge that this objection is made for fear of a loss of profit is justifiable. On the whole, however, I believe this national clearing-house scheme is workable. It will entail great detailed responsibility upon the federal reserve banks, but it can be worked and it will be a great economy to commerce and to the country at large.

The provision for acceptances seems to me wise, but it should be extended to domestic transactions as well as those transactions connected with the importation or exportation of goods.

I can only repeat in conclusion my belief in the incalculable value to all the people of this country of sound legislation

accomplishing what is sought to be accomplished by this measure. The measure is not framed to-day to accomplish it. It will need a great deal of alteration so that there will be a fair chance that it will accomplish it, and I am hopeful that the necessary alteration will be made.

Discussion of Mr. Vanderlip's Address

Mr. John A. Perrin:

There are obvious difficulties in carrying out the suggestion which you make of the retirement of half the national bank circulation. Would not some measure of elasticity arise by reason of the absorption of the gold in circulation through the current transactions of the individual banks with the federal reserve bank,—a stream of money running into the bank carrying some gold and a stream out of the bank never carrying gold, except in negligible instances? This would result in a considerable retirement of the gold certificates that are now serving the uses of paper money. Would there not in that way be created a void into which the new notes would be injected, and would they not be issued in volume sufficient to permit of possibly as much elasticity as through the retirement of half the national bank circulation?

Mr. Vanderlip:

I do not believe so. Of course there would be a tendency for gold to flow into the federal reserve bank, and for bank notes to flow out. But remember that we have now a total volume of currency absolutely ample for every ordinary need we have. There is nothing on which legislation will have so little influence as on the volume of currency in the pockets of the people. The people determine that. That currency ought to be a bank-note currency, almost wholly or wholly. The gold ought to be in the reserve, and the amount in the pockets of the people, which is a variable amount, but which is not varied by legislation, ought to be varied by the redemption of bank notes and the issue of bank notes as the need of the people for pocket money increases or decreases. You have suggested a great difficulty in retiring half the national bank notes. Instead of there being great difficulty, I believe that such a change offers a great opportunity to give to these federal reserve banks a security almost essential to their successful operation.

Mr. Perrin:

The difficulty is in getting legislation to bring that about.

Mr. Vanderlip:

The legislation should be embodied right in this bill, and I am very hopeful that it will be. I had the honor of presenting a bill to the committee last week which, briefly, was this: that federal reserve banks should purchase from national banks one-half of the two-per-cent bonds now in circulation; that they should exchange these for new three-per-cent one-year notes of the government, agreeing to renew these notes at maturity each year for twenty years. When these two-per-cent bonds were purchased, two hundred millions or thereabouts in amount, that volume of national bank notes would be retired; it would be replaced by the new federal reserve treasury notes which the federal reserve banks would issue, having as the basis for these notes at first the new one-year treasury notes, and ultimately putting paper in place of the treasury notes, thus leaving the treasury notes free in their portfolio. A one and one-half per cent tax would be levied on these notes, which tax might have a lien prior even to the dividend right of the stockholders. That tax would reimburse the government for the loss of the one-half per cent on the tax of the present national bank notes and the one-per-cent increase in rate upon two-per-cent one-year notes. This would accomplish, first, the retirement of a sufficient volume of national bank notes to leave room for true elasticity; but, of quite as much importance, it would accomplish this—it would put into the hands of the federal reserve banks a bankable paper of the highest type; that is, a government note of short maturity, which would be available in any market of the world, which they could use in our domestic markets by selling to check expansion, thus drawing in to themselves the reserve from outside banks, and which would be an ideal thing to use for bringing in gold, or checking an export movement, thus controlling the exchange situation. I believe there is an opportunity to do these essential things in this one act.

Mr. Perrin:

May I ask one other question? The paper is obviously only as good as its character makes it. To make paper eligible for rediscount does not necessarily make it liquid paper. Very much of the paper—practically all of the paper in the banks at the present

time throughout the country generally—is accommodation paper. Is it possible, if the privilege of a domestic acceptance were accepted and included in the bill, that the type of bank acceptances, or acceptances upon large insurance policies could be brought into existence in any considerable volume so that it might form a reasonable percentage of the paper in the portfolio of banks generally?

MR. VANDERLIP:

Your statement that nearly all the paper in the banks to-day is accommodation paper you hardly mean, I suppose. In answer to your question, I think there is a strong probability that the banker in the course of his business would become accustomed to this new privilege of acceptances and that we should do a business similar to the business done in England in acceptances.

PROFESSOR SPRAGUE:

The backers of the idea of many regional banks are constantly referring to the fact that there are a number of central banks in different countries in Europe, and for the sake of record I should like to have Mr. Vanderlip explain the nature of the difference between a number of regional banks in this country and a number of central banks in the different countries of Europe, chiefly with reference to the practicability of this proposal for the United States.

MR. VANDERLIP:

Professor Sprague's familiarity with European conditions is so much greater than mine that I hesitate to answer that question. We have a homogeneous population. Banking conditions are affected by the same influences the country over. European countries are far more distinct in their financial relations than are different portions of the United States. I have no doubt that a single European bank would be an advantage over seven. That a number, one to each country, is workable, means that political boundaries are in a measure the boundaries of business; they are not altogether, but they are very much so, which would not be the case with us.

MR. W. C. FORD:

You tell us that only as a last resort is rediscounting necessary. You also tell us that the big banks have no means of rediscounting. Did not the clearing house rediscount seventy-five millions of commercial paper here in 1907? Why is not that inevitable?

MR. VANDERLIP:

The exercise of that power is inevitable under present conditions. We certainly ought to provide by law that we shall never have to use that power.

MR. STEIN:

In your judgment, how will the dividends of the national banks be affected by the proposed law?

MR. VANDERLIP:

That is a question that embraces the entire range of the subject. I might hazard a guess; I believe it would be safer not to do so.

In reply to a question concerning the effect of the bill on bank deposits,

MR. VANDERLIP:

Just a word on this general subject. The National City Bank has some seventy millions of country bank deposits. I estimate, as I said to the committee in Washington, a loss of fifty millions of such deposits. Fifty millions would mean the loss of all the cash we have in the vaults. What are we going to do? In the first place, a reduction of fifty millions in our deposits will reduce our reserve requirements proportionally. Second, the new law drops our reserve requirement from twnty-five to eighteen per cent. We should still be obliged either to reduce loans or to rediscount at the central bank. I believe there will be very considerable strain felt on the three central reserve cities in the first sixty days. I believe, however, that it will not be so great but that they can stand it. After that period, of course, the measure provides for great expansion, possibly too great.

THE NOTE-ISSUE PROVISIONS OF THE OWEN-GLASS BILL[1]

JOSEPH FRENCH JOHNSON

Dean of the School of Commerce, Accounts and Finance, New York University

ON the 28th of September, 1840, Daniel Webster came to New York city and made a speech "On the Currency" before "The Merchants Meeting" in Wall Street. When I first read his address, I was impressed not only by its wisdom and intimate knowledge of the subject, but also by the fact that much of what he said would be pertinent and appropriate if it were delivered to-day. Here, for instance, are his words with regard to banking control, which would apply to the conditions of 1913 just as they did to those of 1840:

> In discounting notes in its own bills, a bank adds to the circulation of the country. In the absence of all government control and supervision, the wisdom and discretion regulating the amount of money afloat at any time is but the aggregate wisdom and discretion of all the banks collectively considered, each individual bank acting from the prompting of its own interests without concert with others, and not from any sense of public duty. In my judgment such a regulator, or such a mode of regulating the currency and deciding what should be the amount of money in the community, is unsafe and untrustworthy, and is one to which we can never look to guard us against those excessive expansions and contractions which have been the source of such injurious consequences.

Webster believed in a central bank and in its control by the government, and some of you, I am sure, will agree with me that Webster was right. None of us have had the opportunity to watch the operations of such a bank, yet many of us are convinced that the Second Bank of the United States, which was a mighty regulator of the currency, would have endured

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

to the present day if from the beginning it had been under government control. That the coinage of money—the most important commodity in the world, used by every citizen in his daily affairs—should not be left to competition, but should be the exclusive privilege of the government, has long been conceded. It follows logically, therefore, that any issue of bank credit in the form of bank notes, since these are universally accepted by the people as the equivalent of money, should, like the coinage of money, be performed either by a government institution or under conditions over which the government has absolute control.

I am in sympathy, therefore, with the underlying intent of the Owen-Glass bill, namely, that bank notes in this country shall be supported by government credit, just as bank notes are in Germany, France and many other countries; and for six months I have been hoping that the framers of this bill would finally draft a workable measure to accomplish this purpose. To-day, with great reluctance, I must state my conviction that they have failed. The Owen-Glass bill creates an entirely new kind of banking machine. Nothing like it has ever been tested by this or any other country. In many of its details it resembles established banking institutions, but in its essentials, in its anatomy so to speak, it resembles no bank with which the world has had experience. If by mandate of Congress it were put into operation, I believe that within two or three years it would bring this country into a period of credit expansion that would terminate in panic and the utter collapse of our banking system.

The reasons which have led me to this pessimistic verdict, so far as they relate to the issue of notes, may be grouped under three heads: First, the bill will lead to a confusion of money with bank credits. Second, it provides for an incompetent and inadequate control. Third, there will be fatal division of responsibility.

I assume that you are familiar with the framework of the Owen-Glass bill, and with the conditions under which notes are to be issued. They are the obligation of the United States; receivable for all public dues; redeemable at all the regional

banks and at the United States treasury, in which a five-per-cent gold redemption fund must be maintained; protected by a gold and lawful-money reserve of thirty-three and one-third per cent; taxed at the discretion of the central board at the rate of at least one-half of one per cent per annum; protected by a deposit of short-time commercial paper. The notes must bear a distinctive letter and serial number, showing through which federal bank they were issued, and no federal reserve bank under a penalty of ten per cent shall pay out the notes of any other bank, it being expected that such notes will be sent home or to Washington for redemption. All these things are details that have no effect whatever upon my argument.

To avoid cacophonous repetition of the words "federal reserve banks," I shall speak of the federal reserve banks as the regional or sectional banks.

Although it is exceedingly difficult to foresee what will happen under hypothetical conditions, we must nevertheless make the attempt. I shall first discuss the conditions under which the sectional banks would issue notes and acquire a mass of commercial paper. A new issue of notes, it seems to me, may be at the instance either of a member bank or of the sectional bank itself, for a member bank may wish to obtain more currency through the discounting of some of its short-time paper, or the sectional bank itself may wish to increase its supply of notes in order to be able to meet the demands of its depositors drawing upon their balances. Thus it will prevent the reduction of its gold and lawful-money reserve.

Second, a sectional bank will obtain its supply of commercial paper from member banks as the result of two separate circumstances: first, because the discounting bank wishes a larger supply of currency; or second, because the discounting bank wishes to increase its reserve balance with the sectional bank.

Either operation, it should be noted, unless the sectional bank already has on hand a sufficient supply of federal reserve notes, will result in the increase of its required reserve by one-third the amount of the paper discounted.

Let us see how the system will operate. Every bank will pay out federal reserve notes, if it has any, in preference to

paying out lawful money, whether over the counter or through the clearing house; for thus it will protect its reserve of gold and lawful money. For the same reason every bank will add to its reserve all the gold certificates and other lawful money which come to it over the counter or through the clearing house. Only in this way can the sectional banks increase their power to rediscount or to issue more notes. The inevitable result will be that lawful money will be drawn out of circulation into bank reserves, its place in the circulation being taken by the federal reserve bank notes—a twentieth-century illustration of Gresham's law.

This result will lead to inflation in one of two ways. First, the banks will lend more freely in their respective districts, causing local or regional inflation; or second, the banks will send idle money to New York to be loaned in Wall Street, thus stimulating speculative prices.

In either case, the foreign exchanges will be adversely affected, and gold will be exported. The gold exporting houses —which are now located in New York city and will continue to be located there, for that city will be the greatest foreign exchange market—will obtain gold for export, not from those regional banks whose issues have been excessive, but by the presentation of federal reserve notes, or greenbacks, or gold certificates, or all three, at the federal reserve bank in New York city or at the national treasury in Washington. In other words, the banks that have been guilty of over-expansion and overissue will not pay the penalty, or be held responsible. On the contrary, since the inflation will almost certainly cause speculative excitement in the market for securities, we may confidently predict that all the mischief will be blamed on Wall Street and its bankers. This bill will certainly not put a coat of white paint on Wall Street.

Inasmuch as there is now in circulation, in use as pocket and till money, at least $500,000,000 of lawful paper money in denominations ranging from ten dollars to one hundred dollars, it is quite conceivable that the federal reserve banks may get into permanent circulation an amount of notes equal to this sum, and at the same time increase their reserves and

the reserves of member banks by an equal amount. Thus we have to face a possible, if not probable, credit expansion of some $2,000,000,000 and that would be enough to drive all our gold out of the country.

The friends of the bill apparently believe that an overissue of notes is impossible provided the security is short-time commercial paper. They argue that the notes will not remain long in circulation, because they must be retired upon the maturity of the paper deposited as security. This is evidently a mistaken view. The bill itself provides for the easy substitution of other securities in the place of those originally deposited, and such provision is absolutely necessary; for otherwise the expansion and contraction of the medium of exchange would be subject to arbitrary circumstances having no connection whatever with the need for currency.

If this country, like Canada or France, had no other form of paper money in circulation than bank notes, and if adequate facilities for daily redemption were provided, it would then be quite true that bank notes issued against commercial paper would expand and contract in response to the needs of business.

Let us next examine the forces which must be depended upon to counteract inflation. I find but one, namely, the Federal Reserve Board—seven men in Washington who are not bankers. How are they going to know whether or not inflation is anywhere in process? They are not bankers, and are not in the banking business. They take no deposits, they make no loans. They do not even redeem the notes the issue of which they authorize. They are not in daily contact with business men. They know nothing at first-hand about the needs of business. They are not able to judge when an apparently prosperous industry is verging on the precipice of over-production, or to distinguish between the red blood of health in trade and the hectic flush and excitement which forebode collapse. Indeed, if the bill permitted the President to put on the board the seven best bankers in the country, I doubt if they would dare assume the responsibility, for their own experience would convince them that they could not at long distance wisely regulate the operations of twelve big,

competing banks in different sections of this great country, each section supremely confident in its own resources and clamorous for all possible aid from the national institution.

The board, to be sure, has the power to examine into the affairs of the federal reserve banks, and is required to obtain and publish once a week a statement of their separate and combined assets and liabilities. Unhappily, wise bank management cannot be predicated upon statistics. A bank president must be in daily touch with his subordinates, and must aid them with his judgment when they are in doubt. The bank statement is a mere bookkeeping record of what has been done, and contains not the slightest hint as to the real character or significance of the transactions recorded.

It is evident that the central board must rely on the information it gets from the federal reserve agent. This officer, it seems to me, is the most important one provided for in the whole system. He is the man who must pass on applications for the issue of notes, and he must judge the quality of the paper offered as security. But this man will know nothing about conditions prevailing in other sections or districts, or about the imperative needs of other sectional banks. Naturally he will be most impressed by the dominant sentiment of his own environment, and will be inclined to do his utmost for the people with whom he is in daily contact. Yet he is the man upon whom the central board must rely for information. How can they learn from him when a regional bank is over-issuing? They will not see the results or feel them; neither will the federal reserve agent nor the managers of the offending regional bank. Finance has wireless avenues of transmission and communication. Fire and earthquake in San Francisco may cause the rate of interest to rise in Shanghai. If an embarrassing demand for gold for export arises, how will the central board know which regional banks are responsible for the inflation? Will they not in their despair of understanding the situation, but knowing that inflation exists somewhere, order an advance of the rate of discount in all sectional banks, and so cause undeserved contraction and distress in many quarters?

We cannot get a clear idea of the way in which the new system would probably work unless we consider just how this central board and the federal reserve notes would be regarded in different sections of the country. We know that in some quarters there is always an unsatisfied demand for capital. Many country bankers feel that they could lend safely much more money than is deposited with them. In prosperous times there is sharp competition between sections to get possession of idle funds in the East. The great difficulty has been the lack of avenues for credit transmission. This has been due to the local character of our banks and to the prohibition of branch banking. No matter what the commercial needs of the West and South, no matter how good the local credit of merchants, nor how sound their paper, eastern banks have been and still are unable to be of much service to the West and South. One of the strongest arguments for the establishment of these federal reserve banks is undoubtedly found in the expectation that they will be able through the rediscounting process to bring about a more equal distribution of the loanable funds of commercial bankers.

But we must not forget that the sectional sentiment in this country is exceedingly strong. We are all proud of being citizens of the United States, yet the average American takes greatest pride in the section where he has his home, his friends and his business interests. Cities and sections are advertising their advantages and their prospects in order to attract both population and capital. This is all friendly competition, but it is none the less real competition.

The Owen-Glass bill sets up in each of these sections a practically autonomous banking institution, managed by citizens of the section and having the power to get money from Washington in exchange for the indorsed promissory notes of local merchants. Financially speaking, this bill incorporates the different sections of this country. To the people and to the bankers of these sections, the central board at Washington will loom up brightly as a golden pyramid. It seems to me inevitable that the local boards of the regional banks will be under constant and tremendous pressure to obtain all the

"money" possible from Washington; and the members of each board, being themselves citizens of the section, will be inclined to share in the general optimism. So the chances are that the central board will receive urgent applications for the issue of notes in excessive quantities, and, as I have already pointed out, they will not be in a position clearly to determine when the issues pass beyond the limits of prudence. Such excessive issues, since they will become a permanent part of the circulation, displacing various forms of lawful money, will not have the natural effect of reducing bank reserves. On the contrary, bank reserves will be increased, and the country will have every appearance of unbounded prosperity, as is always the case on the eve of panic.

It is morally certain that from several of the twelve districts there will come a steady and insistent demand for more "advances." The hunger for money will spring eternal in the regional stomach, and to the people of the United States the federal reserve board will seem to be an inexhaustible well of real money, in duty bound to "gush" whenever the right kind of collateral security is presented.

I am well aware that the advocates of this bill maintain that it contains all the excellent features of the great banking systems of other countries. I cannot in a few minutes point out the weakness of this contention, but I beg you to compare the control for which this bill makes provision with that which now exists in the banking systems of Canada, France and Germany. Canada, for example, has twenty-seven banks, of which twelve are exceedingly strong; but no one of these banks is sectional in character. Each is national—its operations extending over the entire dominion. The managing officers of a Canadian bank pay immediately the penalty for any error of judgment If they overissue or overlend, the unerring dial of the clearing house gives them instantaneous warning. As a result, they practise infinite caution, for they know the perils in their path. All the men at the helm have had lifelong experience in the delicate, intricate and difficult business of banking.

In Germany and France, where the central banks are under government control, the same conditions prevail. The policies

of the two great banks of those countries are directed by men who have had training as bankers, and who feel that they must at all hazards protect the national credit and keep their institutions safe from disaster. In all countries where banking is centralized the mighty stimulus of self-interest is enlisted for the preservation of banking credit, and the bank managers have plenary powers of control and regulation. They are in the closest possible touch with the details of management, and humanly speaking, are in the best possible position to check inflation and over-expansion.

What, then, is the fundamental defect of the Owen-Glass bill, the removal of which will make it a safe and workable measure? If I have clearly expressed myself, I believe you will agree with me as to the truth of the following proposition. A safe and elastic bank currency is impossible in a country in which lawful paper money is in circulation, of the same denominations as the bank notes, unless the issuing institution is responsible for the redemption of both the lawful paper money and the bank notes.

If you grant the truth of that proposition, then you must admit that some single institution must be created which shall be required to redeem on demand not only its own bank notes, but also all other forms of paper money including gold and silver certificates. That being true, it follows necessarily that this institution must be controlled absolutely by the government of the United States, for it must take over into its vaults all the gold now held by the government in its various redemption funds. The Owen-Glass bill would add one more kind of paper money to our kaleidoscopic media of exchange; whereas, the establishment of the institution which I believe the situation calls for would put all forms of credit money on an equal footing, would make them all the liabilities of a bank controlled by the government, and would eventually give us only one kind of paper money, namely, the notes of the great and unbreakable Bank of the United States.

In conclusion, let me quote from a man who solved financial problems with a surer touch than even Daniel Webster. In 1790 Alexander Hamilton, then only thirty-three years old,

submitted an immortal document to the Congress of the United States, in which he recommended the creation of a national bank. Realizing that self-interest had been throughout the ages the mainspring of human progress, he wrote as follows:

> The keen, steady, and as it were, magnetic sense of their own interests as proprietors, in the directors of a bank—pointing invariably to its true pole, the prosperity of the institution,—is the only security that can always be relied upon for a careful and prudent administration. It is, therefore, the only basis on which an enlightened, unqualified, and permanent confidence can be expected to be erected and maintained.

Hamilton's thought was fundamentally sound, but he erred in its practical realization, for he planned a government bank, and then left its control in the hands of private citizens. Experience has taught us what we now need, namely, a national bank in which private citizens shall have a moneyed interest, and in the operation of which they shall have some voice, while over its conduct the government shall be dominant.

THE BANK-NOTE ISSUE OF THE PROPOSED FEDERAL RESERVE BANKS[1]

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THE chief criteria by which we judge the success of a bank-note system may be expressed in three questions: (1) Are the notes well secured? (2) Are they promptly convertible into standard money at convenient places? (3) Does their circulation readily expand and contract with the needs of trade? Let us subject the note-issue provisions of the Glass-Owen bill to this threefold test of ultimate security, prompt convertibility, and elasticity.

I

The security behind this bank-note issue will consist of the following items: (1) An amount of notes and bills of exchange, with short maturities, arising out of commercial transactions, which shall be equal to the amount of bank notes issued; these commercial assets to be segregated, in the custody of an official of the bank appointed by the Federal Reserve Board, for the protection of the bank-notes.[2] The segregated notes and bills must all represent commercial transactions of a type approved by the Federal Reserve Board, and must bear in addition to the names of the men or concerns who issue and endorse them, the name of at least one member bank. (2) Additional security without limit which may be required at any time by the Federal Reserve Board to protect the notes. (3) A segregated lawful-money reserve fund of not less than 33⅓%. (4) A first and paramount lien on all the assets of the issuing bank. (5) Acceptability for all taxes, customs, and other public dues. (6) What amounts to an absolute guaranty by the United States government.

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

[2] Secs. 17 and 14.

It is to be remembered that in addition to all this security, the amount of the issue is subjected to the two limitations *that notes can be issued only when applied for by the boards of directors of regional banks*, and that such applications must in every case receive the approval of the Federal Reserve Board. There would seem to be, therefore, absolutely no question of the safety of the notes. They will be even more secure than the present bond-secured national bank notes —and the safety of these no one questions.

The chief criticism of this feature of the bill relates to the government's responsibility for the ultimate redemption of the notes, a corollary of which is that the notes should be issued to the regional banks by an official or body representing the government. It is urged that this provision of the bill has a strong smack of greenbackism, that it is unscientific and sets a precedent in the direction of the issue of government paper money. Critics argue that the government's guaranty is useless, the notes being adequately protected without it, and that in time of great national danger the government's responsibility for the note issue might greatly impair its credit. Obviously it is self-contradictory to argue, first, that the government's guaranty is of no value in protecting the notes since they are fully protected without it, and second, that such a guaranty would be dangerous to the national welfare in time of war because it would impair the credit of the government. Assuredly the government's guaranty could not impair its credit unless it supported the credit of the bank. In normal times the government's guaranty would undoubtedly add little or nothing to the public's confidence in the notes, and *per contra* would make no draft upon the government's credit. But it is not for normal times that the government's guaranty is asked. It is for times of great emergency, when the stability of the note issue is threatened, and when we are in danger of being forced to a depreciated currency basis. Then, and then only, is the government's credit liable to be called upon. In such an emergency, it is difficult to imagine any purpose more important for the exercise of the government's credit than to keep the country upon a specie-paying

basis. Have we forgotten how the depreciation of the greenbacks demoralized business, played fast and loose with the equities between debtor and creditor, impaired the nation's credit, and increased by hundreds of millions of dollars the cost of the civil war? In times of great emergency the government can afford to increase many fold its tax burden, and to borrow money at exorbitant rates of interest. It cannot afford, except as the price of national existence itself, to let its circulating medium become debased.

But suppose the provision making the government ultimately responsible for the bank notes be stricken from the bill. Will the government thereby be freed from the responsibility? A lawyer, with his eye on the letter of the law, might say yes. A statesman or a social philosopher would unhesitatingly say no. When the government gives to a politically appointed body like the Federal Reserve Board great power, it assumes, through that board, great responsibility. If the notes depreciate or even threaten to depreciate, that fact will be proof that the Federal Reserve Board has failed to exercise properly and effectively its great regulating and conserving powers. The government would be morally responsible for the integrity of the note issue even without any legal responsibility, and the public would hold it so. The force of this responsibility is made more evident when we remember that these notes are receivable for all taxes, customs and other public dues; that they will presumably be held as legal reserve money by non-member banks, and that the banks issuing them are the sole depositories of government funds and the fiscal agents of the government. With or without the guaranty the government's credit is at stake. Why is it so dangerous to admit it frankly and to make the obligation legal as well as moral?

This government responsibility is not a new thing: our present national bank notes are issued by the government to the banks and the government assumes an unlimited liability for their payment. Have these facts led to an overissue of the notes or impaired the government's credit?

II

Does the bill provide adequately for prompt convertibility of the notes into standard money at convenient places?

The places at which the notes are redeemable call for no criticism on the ground of public convenience. These places are: (1) The Treasury Department at Washington, where the Federal Reserve Board is authorized to require the issuing banks, as at present, to keep a five-per-cent gold redemption fund in the United States treasury, and (2) the offices of all the regional banks, which presumably include all the branches.

Much has been said in criticism of the bill for not making the notes redeemable specifically in gold, instead of in lawful money. In this respect, the bill follows the present practise as regards national bank notes, and it will be recalled that the Aldrich plan likewise called for redemption in lawful money. In my judgment, the bill would be strengthened if both notes and deposits were made payable in gold. The fact that deposits in regional banks count as reserves of member banks, while bank notes of regional banks cannot be counted as reserve money by member banks, makes it especially desirable that the deposits as well as the notes be made redeemable in gold.

In support of the claim that the notes should be redeemable in lawful money, it may be plausibly argued that all of our present lawful money (*i. e.*, lawful reserve money for national banks) except the silver (and the minor coins) is specifically redeemable in gold on demand at the United States treasury, and that the Secretary of the Treasury is under a legal obligation to maintain the parity of all kinds of money with gold; furthermore, that the proportion of our total lawful money and of the total money in the country of all kinds, consisting of gold, has been very rapidly increasing in recent years. In 1900, 49% of the lawful money in the country was gold. By 1913, the percentage of gold had risen to 63%. While the gold lawful money of the country has increased 108% since 1900, the other lawful money has increased but 16%. From such figures it may be argued that greenbacks and silver are rapidly becoming an unimportant part of our cir-

culating media, and that, as a consequence, the problems they formerly raised are solving themselves.

This argument carries much weight. But in its application to the question as to whether the obligations of the regional banks should be made specifically payable in gold or not, it contains one doubtful assumption. It is the assumption that after the enactment of the new bill, the same large proportion of gold will be continued. One of the great merits of the proposed legislation is that it will render more efficient our monetary and banking mechanism. Great economies in the use of money and credit will be effected. Our reserve money will be more efficient because better mobilized. There will be important economies in exchange transactions between different sections of the country and much less money will be kept in transit. Many millions of dollars now hoarded in the sub-treasury vaults will be released for active circulation. Provisions for greater currency and credit elasticity will relieve us of the necessity of keeping much idle money in slack periods of the year in order to be prepared for the demands of the active seasons like the crop-moving period. And finally, outside of the bank reserves of member banks, the new federal reserve notes will perform every money function now performed by gold certificates, a fact that will almost certainly result in the substitution in general circulation, on a considerable scale, of federal reserve notes for gold certificates—that is, a paper money with a minimum lawful-money reserve of 33⅓% for one with a minimum gold reserve of 100%. A regional bank can withdraw gold certificates from circulation, thereby making a vacuum in the paper-money circulation, for federal reserve notes, can present these certificates to the treasury for gold, and use the gold as a 33⅓% reserve against the federal reserve notes issued to fill the vacuum created by the withdrawal of the gold certificates. The result will be great and valuable economy in the use of gold and other money, leading to an outflow of that money which has become relatively redundant. Inasmuch as gold is the only money which has a world market, the outflow of redundant money will be in the form of gold. Of course, this will represent a real social economy. We shall have a less expensive but equally

safe and more efficient money and credit system. The released gold will bring back to us approximately its equivalent value in goods. But an incidental result will be that a larger proportion of our currency will be non-gold money and a smaller proportion gold. An effective method of preventing this transformation from going too far would be to require the legal minimum reserves of the regional banks to be held in gold. This demand, together with the demand for gold for the cash reserves of member banks, would assure an adequate gold basis for our circulation.

Another defect in the bill is the small minimum reserve requirement for regional banks, namely, 33⅓%. This is an absolute minimum for notes, but merely a normal minimum for deposits, and the reserve against deposits may be reduced below 33⅓% upon payment of a tax on the deficiency. This minimum reserve requirement is too small, both for notes and for deposits. The reserves of the regional banks will be chiefly reserves against bankers' deposits, which deposits are themselves reserves. Upon the reserves of the regional banks as a foundation, therefore, will rest a very substantial part of the current bank credit of the country. If a minimum legal reserve requirement is to be made at all—and conditions in the United States seem to demand it—that requirement should be large enough to inspire confidence.

There is no legal minimum reserve requirement for the Bank of England or the Bank of France, but the former normally keeps from 45 to 55% against its deposits, and at the present time has approximately 60%, while the latter normally keeps from 70 to 80% against both notes and deposits. For the Reichsbank, there is a minimum reserve requirement against notes of 33⅓%, but the Reichsbank normally keeps more than twice this minimum legal reserve against notes and from 50 to 60% against all demand liabilities. Doubtless most of the regional banks would normally maintain reserves well above the legal requirement, but the tradition among bankers in this country is to run close to the lawful minimum reserve, and it is not unreasonable to expect that some of the regional banks might be disposed to follow this tradition. It is easier to reduce a legal

reserve requirement than to raise it, and it would be well at the beginning to avoid fixing it too low. Perhaps the 50% reserve proposed in the National Monetary Commission's plan is too high, but it is believed that it would be unwise to make the normal minimum less than 40% for both notes and deposits.

This increase to 40% is made the more urgent since the bill, by recent amendments, has made such substantial reductions in the total reserves required of national banks and in the requirements for cash on hand.

From the standpoint of reserves, both deposits and notes should be treated alike, each being a demand liability of the regional bank, and I can see no need of segregating the reserve against notes or of treating it otherwise than that against deposits. The peculiar interests of the noteholders are amply protected in other ways, namely, by the segregated commercial-paper assets, the prior lien and the government liability.

III

The third criterion by which to judge a note issue is that of elasticity. Will the proposed federal reserve notes promptly expand and contract according to the needs of trade, as do the notes of the Canadian chartered banks, or will they prove rigid and unresponsive to trade demands, like our present bond-secured notes?

The facts that these notes are issuable only against rediscounted commercial paper with short maturities, that they cannot be counted as reserve money of member banks, and that when the notes of any regional banks are received at the head office or branches of any of the other eleven banks or at the United States treasury, they cannot be paid out again, but must be returned to the issuing bank, alone will provide an adequate elasticity. Under such regulations, notes can be kept in circulation only when trade conditions demand them, and their continual return to the issuing bank will prevent a redundant circulation.

I can see no justification for the provision of the bill [1]

[1] Sec. 13, page 32, 11, 14 to 17.

requiring the Federal Reserve Board to fix a "rate of interest" of not less than ½% upon the federal reserve notes turned over to regional banks. Such a tax—it is in reality a tax and not an interest rate as the bill terms it—would add nothing to the effectiveness of the mechanism already mentioned for preventing a redundancy of note circulation. If the burden of this tax should fall directly upon the regional banks, it would probably come largely out of the government's share of the profits. If it should be shifted to the ultimate borrower, through higher rediscount rates on the part of the regional banks and resulting higher discount rates on the part of the member banks, it would fall upon those borrowers who took the proceeds of their loans in deposits, as well as upon those who took them in notes, and would be a needless burden on commerce. The borrowing bank has its choice as to the form of credit, deposit or bank notes, in which it will take the proceeds of its rediscounts. On both forms, the rate of discount is the same. A deposit credit and a note credit with a regional bank are interchangeable on demand; the notes may be deposited, or the deposits may be checked against for notes. Inasmuch as the deposit can be counted as lawful reserve money by member banks and therefore serve as the basis of further credit expansion, while the note credit cannot, the danger of an over-expansion of credit is more likely to be in the form of deposit credit than of note credit. Furthermore, to strike out this tax provision would result in eliminating a possibily dangerous arbitrary power in the hands of the Federal Reserve Board.

The best method of putting on pressure to check an over-expansion of credit is to apply a graduated tax to reserve deficiencies, measured against both notes and deposits. This brings the pressure to bear upon both forms of credit expansion, and applies it at the crucial point, namely, the reserve. The rate of such a tax should be specifically fixed in the law, so that the regional banks, the member banks and the public can foresee its application and adjust their affairs to it in advance. In any such institution as the one proposed, a certain amount of arbitrary power must be given to the governing body. The presumption, however, is always in

favor of devices that work automatically. They function more smoothly, and since it is possible to anticipate their workings, they will be less liable to produce sudden shocks. In the world of finance, there is no truer adage than the old one, "Forewarned is forearmed." I would suggest that the deficiency reserve tax be fixed at, say, 1½% for each 2½% or fraction thereof that the reserve falls below 40%, until the reserve reaches 30%, and then that the tax be doubled. But there should be no absolute stone-wall limit beyond which the reserve could not be reduced, providing the tax were paid.

With the adoption of these minor changes, I should expect the Glass-Owen bill to provide a bank-note circulation that would meet well the three great tests of a good bank-note—ultimate security, prompt convertibility, and elasticity.

In this paper I have confined myself to these three fundamental features of the note issue. The question of what shall be done with the present two-per-cent bonds is an important one, and one now urgently demanding from the administration prompt assurances of a fair answer. It does not fall properly within the scope of this paper, but I cannot leave the subject without saying that in the interest of the future credit of our government, and much more in the interest of that sense of generous honesty and fair play which we all like to attribute to the nation we honor, the government should make ample provision to assure the holders of the two per cents, for whatever purpose they were bought, of receiving full par value for their bonds. I believe firmly that national banks should be compelled to come into the new system. If they wish to enjoy a national charter and the privileges such a charter confers they must expect to play the game according to the national rules. They are given a year to decide. If they do not wish to avail themselves of the privileges and to assume the obligations which the government requires in the public interest for banks under federal charters, they should retire from the national system. It would be petty and wrong, however, for the government to enforce such a compulsion by a financial penalty that involves the repudiation of a clearly implied moral obligation. I cannot believe for a moment that the government will adopt such a course.

THE COUNTRY BANKS AND THE OWEN-GLASS BILL[1]

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THE purpose of my remarks is to indicate the probable effect of the pending Owen-Glass currency bill on the country banks, and the attitude of those banks to that measure should it become a law as it now stands.

The Owen-Glass bill is an improvement on our present law, as it creates a note issue based on commercial needs and contemplates the gradual retirement of our present bond-secured notes, which by their character and limitations have been and are so largely responsible for our financial ills. The experience of both this and other countries points conclusively to the fact that the issue of notes is not a government function but a bank function. Bank notes, when issued under proper safeguard, have never been a cause of loss to the holder. On the other hand, more money, it can safely be said, has been lost by the holders of government notes than by holders of any other single investment that the world has ever known. The fact that the government of the United States has never defaulted on any of its obligations does not alter the fact that in principle the issue of circulating notes by a government is wrong. It is only necessary to look back to the time of the civil war to realize the immense loss incurred by holders of government notes when compelled to convert them into gold. The notes should be the notes of the regional reserve banks issued under the closest government supervision and control.

The country banker remembers that in 1907 when his depositors became alarmed over financial conditions and demanded their deposits, they wanted cash. When he in turn attempted to get the cash from his reserve bank, it came hard

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

and sometimes not at all. He also knows that the reserve bank was perfectly sound and would have been glad to send him currency to meet his needs, but that this was not possible, as there was no process of law which enabled either the reserve bank or the country bank to exchange its good assets for a circulating medium with which to satisfy the demands of frightened depositors. The country requires two things, elasticity of currency and credit and mobilization of reserves. The purpose of the latter is to prevent individual demands from weakening the situation. This it proposes to do through the creation of a common fund, which by its strength would in itself insure confidence. The elasticity of currency and credit means that the depositor can have something which will be accepted as money without question, while the banker can expand his credits without encroaching on his reserves. The vital thing is that the volume of notes provided under the Owen-Glass bill shall automatically expand and contract to meet the requirements of trade. Whether this will be the case is a subject for serious doubt. Many believe, and I agree with them, that the expansion provided for in this bill may be entirely used up in an inflation of credit, so that when the pressure comes the new system will break down just as the present system has done in the past.

Moreover, the Owen-Glass bill, instead of resting content with the provision of elasticity and mobilization, would revolutionize our national banking system. This is neither necessary nor desirable from the standpoint of either the bank or its customers. Whether avowed or not, the effect of the Owen-Glass bill will be to destroy the existing relations between the reserve bank and the country bank.

The reserve carried with the reserve bank is gradually to be reduced and after three years all reserves must be carried in cash or in the federal reserve banks. This will result in severing the relations which have grown up between the bankers in the small towns and cities of the country and the banks of large cities. The attempt to dislodge the large amount of money now on deposit in the reserve cities is not necessary in order to reform our banking system and will not be effective

even under this bill. The moment that the connection of mutual benefit between the country banks and the reserve banks is broken, the latter will have the desire and will be in a position to compete with the former for the cream of their business. Every advantage except location and the personal equation will be in favor of the larger institutions. Some of the large city banks may take out state charters and withdraw from the national system. For example, under the law of New York, branches are permitted with certain restrictions as to locality. The Corn Exchange Bank of New York demonstrates the possibilities of this system. If this law were broadened it is easily seen how the business of the state could soon be handled by a few large institutions with hundreds of branches all over the state. Most of the branches would result from the enforced absorption of the present national and state banks. There is no reason why the same transformation should not occur throughout the country. The effect of this would be, first, and perhaps most important from the standpoint of the country banker, a radical change in his business, and at best a modification of his present independence; second, and more vital to the country as a whole, the creation of two systems, one under state control, managed by bankers, the other under federal control and subject to the danger of political influence in its management. Not only would these two systems have few bonds of common interest but they would be intensely competitive. Would this not, instead of unifying and strengthening the banking situation, interject a new element of division and weakness?

The proposal of the government to revoke the charters of those banks unwilling to comply with the requirements of the new law would amount to confiscation unless opportunity were given banks withdrawing from the national system to be relieved at par of the government bonds which they own. The banks now hold $700,000,000 of these bonds on which the interest rate is 2%, a rate due not to the value of the bonds as an investment but to the circulation privilege attached thereto. There should be no compulsion to join the new banking system. The banks should be left free to act

as their best business judgment dictates and not be coerced by the danger of financial loss into an unwilling acceptance of a position of which they do not approve. The conditions involved in membership under the Owen-Glass bill should be such as to commend themselves to every banker in the country. Then even if there are grounds to expect a slight decrease in earnings under the proposed system, enough bankers would join to make it an immediate success. With such a system once in operation it is hard to believe that every banker in the United States would not seek membership.

The bill provides that the federal reserve banks act as clearing houses and accept at par checks drawn on their country depositors. This puts the burden on the country bank and is all to the advantage of the banks in large cities. It has been referred to as an attempt to run water uphill. A check is an order on a bank in a definite place to pay money at that place and there always will be some expense in transmitting to some other place the money which the check represents. The burden, if any, should be on the collector. If the holder of a check is unwilling to pay the expense of collection he should demand payment of his bill in funds current in his own place of business.

As to the clause requiring the segregation of savings deposits, the result would in many instances be a curtailment of the local usefulness of the banks. Funds in so-called savings accounts are now very largely used for commercial purposes, and any attempt on the part of the government to require the investment of these funds in a restricted class of securities would divert this money from its present safe use in building up the community in which it originates. There would be the added danger that too large a proportion of these funds would be invested in real-estate mortgages, not a liquid asset.

The doctors have diagnosed our trouble as a bad circulation, but to relieve the patient they propose to perform an operation on the heart, severing the mutually beneficial relations which have grown up between bankers all over the country, rather than stimulate a proper flow of blood by a healthy exercise of

the different functions of the body economic. Not only that, but should the patient recover, further minor operations are contemplated. As an officer of a state institution, a country bank which will be free to accept or reject the new system on its merits, I have endeavored to show some of the defects of the bill and have referred but little to its many merits. With but a few amendments, the Owen-Glass bill can be made a measure which will give to this country a safe and sound banking system.

THE BUSINESS MAN AND THE NOTE-ISSUE PROVISIONS OF THE FEDERAL RESERVE ACT[1]

IRVING T. BUSH

President, Bush Terminal Company

THE Owen-Glass currency bill has so many excellent features that I believe comment upon it should be limited to constructive suggestions, with a view to so improving the bill as to make its passage possible and desirable. The laws under which our present banking and currency machinery is operated are workable only in fair financial weather, and the present bill is so nearly acceptable that destructive criticism which will prevent any legislation seems most unwise. My remarks are limited to the note-issuing provisions of the proposed bill.

Conservative bankers object to the method of note issue prescribed in the bill, on the ground that the credit of the government should be kept entirely free from the danger of becoming involved in the banking transactions of the country. They claim that as the notes are to be secured by the assets of the regional bank to which they are issued, and also by the specific pledge of high-class short-term commercial paper and a reserve of 33⅓% of lawful money, they are secured absolutely beyond any peradventure, and the placing of the credit of the government behind them is unnecessary, and does no possible good. They admit that the danger to the government under normal conditions is insignificant, but argue that should international complications arise the fact that government guarantee is placed behind a large volume of notes may seriously interfere with its credit and ability to sell bonds.

Those in favor of the method suggested in the Owen-Glass bill contend that the federal reserve notes, while perfectly secured by the collateral pledge and the assets of the regional

[1] Discussion at the meeting of the Academy of Political Science, October 15, 1913.

banks, will command much more ready acceptance in all parts of the world, if the guarantee of the government is behind them, and claim that the guarantee can be given without involving the government in the slightest risk.

Much harm has been done by the extreme statements made by some of those who are radically opposed to all features of the bill, and who claim that the federal reserve notes are strictly a government issue, and will be merely the forerunner of an unlimited government issue of treasury notes. There is nothing to justify these statements, but many citizens who have given only casual attention to currency and banking legislation have received an unfortunate impression from them.

It is unfortunate that compromise is ever necessary, in treating great subjects of this character, but in a country three thousand miles across, and containing a population of nearly one hundred million people, it is frequently impossible to crystallize public sentiment into ideal legislation. In the present instance, the note-issuing provisions of the Owen-Glass bill are undoubtedly a compromise, but if a compromise be necessary, the one arrived at in this case reflects credit upon the authors of the bill, for it preserves the best features of both the conservative and the radical school of financial thought, without the introduction of absolutely unsound methods.

It is true that the proposed notes will be issued by the government, but this function of issue is not different from the method used in our present bank notes, and consists chiefly of a central engraving and printing establishment under government control. The notes cannot be forced into circulation by the government, and can be issued only at the request of the regional banks, a majority of whose directors are selected by the local banks of the country. The notes are secured by the pledge of commercial paper, and by a reserve of 33⅓% of lawful money. From the standpoint of the method which brings them into circulation, and of the security behind them, they are not government notes, but bank notes. It is inconceivable that the security upon which their issue is based should prove inadequate, and there is considerable force to the argu-

ment that if there is to be established so large a number of regional banks as is proposed, the final guarantee of the government will create in foreign countries a confidence in the notes which might not otherwise exist.

What should be the attitude of the business man to this question? I am told that there are rated by Dun and Bradstreet agencies 1,700,000 business men and approximately 25,000 banks. The final burden of a defective banking or currency system is really borne by the business men of the country. Surely they should have something to say upon this subject, and surely their views should carry some weight.

The Owen-Glass bill in its note-issue features is undoubtedly a compromise, but I believe that the business community should recognize the almost insurmountable difficulties which Mr. Glass and Senator Owen have been compelled to overcome, difficulties which few can realize who have not been brought into direct contact with them. There is so much that is good in the bill that criticism should be confined to constructive suggestions as to how the bill can be made as acceptable as possible. Mr. Vanderlip has said to-day, from his standpoint as a banker, that at least 80% of the bill is good. The tearing to pices of the bill and leaving nothing in its place seems to me most unwise. Business men should make only such suggestions as will be helpful in creating a better bill. For myself I am free to say that the note-issue function is satisfactory, and I am not at all sure, although I have been brought up in the school which believes that notes should be issued only by banks—I am not at all sure that the method which the framers of this bill have found, in putting the real responsibility for the redemption of the notes upon the banks, but in the eyes of the world placing the guarantee of the government behind them, is better than the method of note issue by the banks alone.

CRITICISMS OF THE NOTE-ISSUE PROVISIONS OF THE OWEN-GLASS BILL[1]

A. PIATT ANDREW

Former Assistant Secretary of the Treasury

THE real trouble with the House banking bill in my opinion is that its framers have not been content to try and remedy the crucial defects in our banking system, but have tried also to remedy conditions that have no essential relation to that system. Among these conditions for which they seem to imagine that our banking arrangements are responsible and for which they have endeavored to provide a remedy is the lack of sufficient capital from which they think that the world is suffering.

The committee in their report inform us that " legislation was never more urgently demanded than it is today " " which will furnish loans upon an inexpensive (*sic*) but absolutely safe basis." The framers of the bill accordingly have not merely sought means of preventing the collapse of credit and means for making currency and credit available in emergencies and during limited periods of stress. One can detect all through the bill an effort to make currency and credit " more available " and " less expensive " all the time.

The bill provides for a vast extension of credit both in the form of ledger balances and in the form of notes, and it provides no effective mechanism to secure subsequent contraction. It therefore does not insure real elasticity. As regards the extension of credit in the form of deposits or ledger balances, the bill offers to reduce the required cash reserve of the New York city banks from 25 to 9%, or in other words from approximately $300,000,000 to about $100,000,000. It would reduce the required cash reserve of Chicago and St. Louis by the same percentage, or by about $100,-

[1] Discussion at the meeting of the Academy of Political Science, October 15, 1913.

000,000. It would reduce the cash requirements of the national banks of the country as a whole by about \$380,000,000 (I base these figures upon the comptroller's report for June 14, 1912.) If this cash, along with the \$200,000,000 or so of government funds, were turned into the reservoir of the federal reserve banks, as the bill contemplates, these reserve banks in their turn could extend their credit threefold, as they are to be required to hold in cash only a normal reserve of 33⅓% against their deposit liabilities. In other words, according to the terms of the bill, such a situation would allow an expansion of credit by the reserve banks to the individual banks of over \$1,100,000,000.

I believe that such additional reserves of lending power ought not to be put at the disposal of the banks in normal times, but ought rather to be kept available as means of relief in periods of disturbance. I believe therefore that the reserve ordinarily to be held by the reserve banks ought to be far higher than 33⅓% but that of course a provision should be included which would make possible the use of any and all reserves in periods of stress. This could easily be accomplished by means of a tax upon the deficiency in the reserves below the normal minimum proportioned either to the amount of the deficiency or to its duration.

Again, no restrictions are specified in the bill as to the powers of a member bank to rediscount its commercial paper with a reserve bank save in the character and maturity of this paper. The character of the paper is loosely described as including not only all notes and bills the proceeds of which have been used for agricultural, industrial or commercial purposes, but also all bills and notes which "may be" so used. There are few bills and notes which conceivably "may" not be so used, and as Secretary McAdoo has recently shown, the majority of the paper held by national banks complies with the maturity requirements of the bill. While the banks ought to be enabled to rediscount practically without limit in times of crisis, in order to prevent immediate and permanent inflation there ought to be some provision which would limit the amount of rediscounts under ordinary conditions.

But above all, the note-issue provisions of the bill are inflationary. The government is to be allowed to issue its notes without any other limit than the provision that they shall not exceed three times the amount of lawful money held by the federal reserve banks, and it is not clear from the law that a reserve bank may not count as reserve for this purpose the same 33⅓% of lawful money which according to another section of the bill it must hold against its own demand liabilities. In any case this provision allows the issue of additional government notes to the extent of hundreds of millions of dollars and against these notes the government is not only not required, but it is not allowed, to hold any reserve whatever beyond a 5% gold fund which the bill authorizes the Federal Reserve Board at its option to require the reserve banks to provide. As the Treasury is obliged to deposit all of its general funds and revenues in the reserve banks it is legally estopped from holding more than this 5% reserve for the redemption of these notes. No other gold reserve is required to be held even by the reserve banks, for although they must ordinarily hold "lawful money" to the extent of 33⅓% of the notes deposited with them, the lawful money may consist of silver or greenbacks. In other words, the reserve to be held by the federal reserve banks to redeem the new government notes may consist entirely of other government notes.

Some of the members of the committee have argued that inflation is sufficiently guarded against in the bill by the provision in section 17, incorporated during the discussion in the House, that no reserve bank shall pay out notes issued through another reserve bank. They assume that this provision will prevent any more than a temporary addition to the currency through the new government notes, but as such notes issued through one reserve bank may not find their way to another reserve bank for years, and even when received by another reserve bank are to be returned at once to the reserve bank through which they were originally issued, and so may be immediately reissued, and as the tax to which they are subject may amount to no more than ½% per annum, there is

no reason to expect that contraction will follow any expansion of these notes. There is nothing to prevent their repeated reissue and their continuance in circulation to the extent of hundreds of millions if only the bank through which they are issued retains lawful money to one-third of their amount, and an equal quantity of commercial paper.

Some of the committee also seem inclined to the view that if inflation does tend to result from this new issue of government notes it will be offset by the retirement of national bank notes. But there is no assurance that these notes will be retired before the expiration of twenty years, and furthermore under the terms of section 4 the reserve banks are given power "to perform all those acts and to enjoy all those privileges" conferred upon national banks by section 5136 of the Revised Statutes, which privileges include "obtaining, issuing and circulating notes" according to the provisions of the national bank act. The federal reserve banks are apparently thus authorized not merely to act as agencies for the issue of the government federal reserve notes, but also to purchase government bonds and to issue their own notes in the same manner as national banks. If the adoption of the bill were to result, as many predict, in important withdrawals from the national banking system and the sale at much lowered prices of the government twos, one may anticipate that many of the released bonds would be purchased by the reserve banks and that notes would be issued by them to take the place of the notes relinquished by the national banks.

The House committee therefore propose to make a real and permanent addition to our already redundant money supply of hundreds of millions of government paper money with provision for only a 5% reserve of gold, which moreover is to be held only at the option of the federal reserve board.

One of the most important functions of government is to create and maintain the monetary standard, the measure of value by which all of the exchanges and payments and obligations of the country are settled, and the monetary history of this and every other country testifies to the dangers to which this standard is subjected by the issue of government

paper money. No foreign government has ever undertaken to issue notes without at some time overissuing them and so degrading the standard of value, and the leading governments have therefore long since abandoned the issue of fiat money. The experience of this country with such money from earliest colonial days abundantly points the same lesson. It is unnecessary, however, to hark back to the lamentable experiences of colonial and revolutionary times. From the date of our last issue of government notes fifty years ago almost to the present day the outstanding government paper money has been a source of unsettlement to business and at repeated intervals even within the recollection of men not yet old these notes have menaced the very solvency of the treasury. Generation after generation of sound-currency advocates have sought to get rid of them, and the effort to do so has subsided within the last decade only because with the lapse of fifty years since their issue the amount of the remaining greenbacks has become relatively unimportant. No lesson of our history is plainer than that the government ought not to jeopardize its own credit and the people's standard of value by the issue of note obligations that are not covered dollar for dollar by gold. With the disgraceful and costly history of greenback and silver legislation so freshly in mind it would indeed be folly to begin again the issue of government credit notes at the present day. To attempt it with only a 5% gold reserve in the treasury such as the House bill proposes but does not even require, would be an unbelievable folly.

It is doubtful whether in any other civilized country to-day, including Central America and the Balkans, so nondescript and precarious a note currency could be found—an issue of government notes which it is expected will amount to several hundred millions of dollars against which absolutely no reserve of gold is required to be held, and against which the issuing and responsible government is by law not allowed under any circumstances to hold a reserve of any kind of more than 5%.

DISCUSSION OF THE ELASTICITY OF CREDIT

Mr. Edward D. Page:

Mr. Bush has stated the great interest that is being taken in this question. It is, as he has stated, a very serious matter. I have approached from a little different angle the question of whether these notes should be the obligations of the government. For seven years I conducted business under the very distressing conditions that prevailed after the panic of 1873, and as a merchant I saw the distress and agony that resulted from the issue of government paper.

The dangers of government currency were well indicated by Pelatiah Webster a century and a quarter ago:

" We have suffered more from this than from any other cause or calamity. It has killed more men, perverted and corrupted the choicest interests of our country more, and has done more injustices than even the arms and artifices of our enemies."

That was absolutely true of the currency which this country put out during the civil war. I saw men die by scores during that terrible period—business men, heartbroken by their inability to meet the conditions of the day. I sincerely hope that I shall some time have an opportunity to lay before the committee in Congress the real objection to this most perilous proposition.

Mr. Sternberg:

We all seem to be agreed that one central bank would be much better than the twelve federal banks, on the geometrical principle that there can be only one center to a circle; but I realize that it is impossible to convince Congress on this point, and we must make the best of the things we can get. We are to have twelve banks, and they are to be co-central, not independent and not competing with one another.

Mr. Vincent:

As a business man, I want to ask one question about this bill. I am interested in the coal-mining business. I am also a farmer. I sell $5,000 worth of horses on credit and take a straight note. I sell $5,000 worth of my stock in this coal mine and I take a sixty-day note for that. I go to my bank with these two notes and want to realize the money on them. The banker takes the horse note, but refuses the mining-stock note. Why? Because under the provisions of this bill the mining-stock note can not be rediscounted in the regional bank. Inasmuch as ninety per cent of the

business of the country outside of agriculture is done by corporations, why must this currency bill outlaw safe, sane, business transactions that are carried on by them every day?

THE CHAIRMAN:

That brings up the entire question of how far a credit system can afford relief to all members of the public. This bill does not attempt to afford any relief to the farmers of the country, because that is sought to be provided for in a future bill. It is perfectly possible that other sections of the community may have to be relieved in a similar way.

THE CLEARING OF CHECKS AT PAR[1]

W. M. VAN DEUSEN

National Newark Banking Co., Newark, N. J.

I WISH to draw your attention for a few minutes to that part of the proposed currency bill which provides for the "parring" of certain checks; I refer to the latter portion of section 17.

The immense volume of checks used in the commerce of the country makes it appropriate that some action should be taken in the proposed revision of the currency to improve the methods at present adopted for their collection; and the insertion of the provision for their collection in the note-issue section of the bill is also most appropriate, for in a general way the problems involved are similar. Checks, like bank notes, are a substitute for money and perform their function most perfectly when their circulation is as free as possible and their redemption is easily and promptly accomplished. If the proposed section of the currency bill will aid the circulation and redemption of checks it will greatly benefit all those engaged in the commerce of our country.

The checks on country banks are at present collected at great expense, often by roundabout routes and with much unnecessary labor. The reason for their being handled other than directly is to be found largely in the charges made for their collection by the banks on which they are drawn. These charges, usually called exchange, range from $^1/_{10}$ to ½ of one per cent of the amount of the checks and occasionally go higher through the practise of some banks charging so much for each check instead of remitting for the total of all the checks enclosed in a letter, with a minimum charge of from 10 to 25 cents per check even though it may be for only a dollar. These charges are often not affected by competition

[1] Discussion at the meeting of the Academy of Political Science, October 15, 1913.

because of an agreement among the banks of a city fixing the rates and even agreeing to pay exchange to the bank on which the check is drawn. These charges are not always made in cash, but are secured by an arrangement on the part of the collecting bank to remit for the checks at certain periods, in the meantime holding and using the money. These charges are defended on the ground that it costs the remitting bank to provide funds in the large centers to cover remittances for the checks, and that compensation should be made for the postage and labor of handling remittances. It is also claimed that a check is payable at the bank on which it is drawn and that this provision of the bill would make it payable elsewhere,—that is, at the office of the federal reserve bank. The result of this expense of collection is that many banks send their checks by devious routes in the hope of saving or lessening the charges. Consequently it is often a considerable time before a check is presented for redemption, and in the meantime fictitious balances are created in the banks through which it passes, and much unnecessary work is done. Often the reserve balances of banks held by them in reserve cities are used entirely to compensate the reserve city bank for the collection of the various checks of the depositing bank, thus confusing the subject of reserves with that of compensation for other services.

Many attempts have been made to find a remedy for the situation which has developed in the handling of these checks. The most successful of all is the system used in Boston for the collection of New England checks, which is modeled after the old Suffolk system for the redemption of bank notes. I have not time to go into the details of this system but must note a few of its main features. The checks on the country banks of New England received by the Boston banks are sent by them each day to the clearing house, which sorts them according to the bank on which they are drawn and sends to each bank all checks drawn on it. The country bank on receipt of its checks sends a par remittance to the Boston clearing house for the checks it receives, the remittance being in either Boston or New York exchange or in currency at the

expense of the clearing house. Payment for the country checks is made to the Boston bank on the second day after it sends them to the clearing house. The result is that almost all of the checks on New England banks, especially those used in New England, are presented for payment within a few days after they are drawn, and at a minimum of expense. As a consequence New England checks are more readily received throughout the country than checks on any other section. Practically all the banks in New England have agreed to the Boston clearing-house arrangement. There have been attempts made to use the Boston system in other parts of the country, and while none of these attempts have attained the success of the Boston arrangement, yet all of them have resulted in an improvement over the old conditions. A somewhat similar system for clearing country checks is in use in London.

The new currency bill proposes that each regional bank shall act as a clearing house for its member banks and shall also take on deposit at par checks on other regional banks. If this part of the bill can be put into successful operation and the banks of the country in large numbers join the regional reserve banks, it will result in the division of the country into a number of collection districts and the checks on the banks in those districts can be handled in much the same way that New England checks are now handled in Boston. This cannot help being of benefit to the banks as a whole and to the commerce of the country. It would mean the direct and speedy collection of checks, would reduce the labor caused by handling checks many times oftener than necessary, and would eliminate false balances. The cost of providing cover in the reserve center for checks drawn on a country bank would be less than now on account of the proximity of the regional bank or agency. The success of this method of collecting checks would depend largely on the question whether most of the banks of the country found it to their advantage to join the regional banks, as this system of collecting the checks would be of little value if only a moderate proportion of them could be handled in this way.

THE GEOGRAPHICAL BASIS OF DOMESTIC EXCHANGE RELATIONS[1]

FRED. I. KENT

Bankers Trust Co., New York

THE course of domestic exchange in the United States of America is governed by three conditions: first, the fact that the original settlements were on the eastern coast and that they were peopled from the European countries; second, the fact that Europe, with its many nations so closely allied to us in manners and customs, lies to the east across the Atlantic Ocean, and the Orient with its strange peoples, modes and habits lies to the west across the Pacific Ocean; and third, the topography and geographical position of the United States itself. These three conditions all work together to make New York city the natural and economic reserve center of the country. The eastern coast, having been settled first, and having resources capable of meeting all the needs of man, is to-day the wealthiest and most thickly populated section of the country. It consequently supplies capital, necessities and luxuries to the later developed and developing West and South. Standing between the West and South and the countries of Europe, where our greatest trade naturally lies because of common manners and customs, the East has become at once the gateway and reservoir of our commerce. Its greatest city has grown about its greatest harbor, and because this harbor is situated at the most convenient point for reaching both West and South, that city has become one of the great clearing places of the world. Our trade with the Orient has been secondary, and probably will be for generations, first, because our western coast was settled last, and second, because our people and those of Asia and Australasia can only exchange unusual commodities instead of

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

staples, on account of the wide differences in dress and modes of life. Even the Far West therefore continues to draw upon the East for its every-day requirements and through the East from Europe, and so New York city is the focus of the principal lines of trade to and from all points in the United States and all points in Europe. Our great internal trade has developed largely to take care of our foreign trade, and consequently the centers of our internal trade all have direct communication with New York city. Thus we see a closer relationship between the cities of Texas and New York city than between those cities and St. Louis, between the cities of the Pacific coast and New York city, than between such cities and Chicago, and so on throughout the country. Expressed in terms of domestic exchange, this means that it might be easier for one in Nashville to pay a bill in Louisville in New York exchange, which could be purchased in Nashville and would be acceptable in Lousiville, than to do so in Louisville exchange.

The United States is divided into many zones of clearly marked special productions or activities, such as the cotton, wheat, corn, fruit, lumber, coal, iron and various manufacturing territories. To be sure, some wheat and corn are grown in the cotton country, and mining districts are covered with small farms and diversified industries here and there, but in the main where one product is the staple that part of the country producing it must import the other necessities of life in exchange for its specialty. It is only by such division of labor that it is possible to feed and clothe our vast population. Every commercial, producing and manufacturing district, therefore, becomes of the utmost importance to every other, and for its own and the public good each should be contented to take the part for which it is best fitted, and should not cast envious eyes upon the success or business of its neighbors. New York city, because of its position, gathers together wealth from many regions where it is not needed, and distributes it to other regions where it is needed. Every city and town does this also to a certain extent, but New York is the center that is to other cities and towns as they

are to their own communities. The result is that New York exchange is the universal domestic exchange, if it may be so called. The flowing into and out of New York city of the money and credits of the country constitutes our principal exchange movement, and this is the reason that the greatest market for stocks and bonds in the United States is in New York city.

It is just as important for the farmer that he have railroads upon which to move his grain as it is for him to be able to raise a larger amount of grain than he needs for his own use. It is also just as important for the farmer to have industrial concerns financed that can develop and improve harvesting machinery as it is to be able to borrow money that will enable him to grow a larger crop than he could otherwise do. The market afforded by the stock exchange is consequently of as great value to him as the money market outside of it. If funds were not to be had for the purpose of making a market for the industries upon which he must needs depend in order to increase, harvest and transport his crop, his opportunity for profit would be greatly curtailed, and he might be obliged to return to diversified farming, which alone would make it possible for him to have his family live off that which his own farm supplied, as was true in the days of the pioneer. In such case the city would cease to exist; for starvation would spread its population over the length and breadth of the country. This is, of course, the impossible extreme, for the tendency would be stopped after it had gone far enough to cause sufficient suffering to bring about a reaction. There is just as much reason for legislation to compel the cotton farmer to grow only sufficient cotton for his own needs and to divide up the rest of his land into wheat, corn and vegetables, until he can supply only himself and his family, and the grower of wheat to reduce his wheat area and re-plant similarly, as there is to endeavor to split up into small units the money and credits of the country.

For these reasons and many others, it is necessary for the prosperity of the people of our country that no funds be withdrawn from New York city which natural trade conditions

require there. It is true, however, that such funds as may have gone to New York, because our currency system could not contract when business demanded, can be taken away from that city with benefit to all concerned. A proper currency system, which would take up the slack in times of easy money, would undoubtedly of itself solve this problem, and no artificial means would be required. The regional banks should, therefore, act as reserve agents for only a part of the reserve required of member banks, and the money that bankers must of necessity maintain in New York, in order to meet their business requirements, should be counted as reserve. Legislation should leave as much freedom as possible for business to be consummated naturally; otherwise unnecessary friction and expense will occur.

Reasons similar to those which make New York city a receiver and distributor of credit apply to Chicago, St. Louis, and many of the present reserve cities—that is, their geographical position gives them a business that if left to be carried on along the lines of least resistance makes their exchange valuable to certain communities.

The regional banks would not be able to transfer funds from one part of the country to another with the same facility as a central bank. If a central bank had branches in New York and Chicago, for example, money could be paid into the Chicago branch and paid out of the New York branch until the supply in the New York branch was at the lowest point that the business of that branch would allow. This might make it possible for the central bank to take care of all such transfers without the shipment of currency until the tide turned and money was deposited in New York to be paid out in Chicago. The natural seasonal requirements of this country are very marked, and cover several different periods with much regularity. If a central bank were able to count, as reserve, money held in both its New York and Chicago branches, its strength would never be affected by such transfers. In the case of distinct regional banks, however, this would not be true, and it will probably be necessary for such institutions, if organized, to ship currency bank and forth say

between the New York and the Chicago federal reserve bank much more often than would be true in the case of a central bank.

While legislation may be able temporarily to force domestic exchange to run counter to its natural course, yet it would entail unnecessary expense, and there is no doubt whatever that such legislation would ultimately have to be repealed. It would seem wise, therefore, to recognize immediately rather than after expensive experiment the part that each portion of this country plays in its growth and prosperity, and not delude ourselves with the belief that any one industry can prosper by itself or that we can with impunity destroy the natural power of any community without injuring all the rest. Every part of our country depends to a certain extent upon the success of every other part, and if we would continue our development with the greatest benefit to all, we must work together without jealousy or animosity, let each community do that which it is best fitted to do, and allow our operations in domestic exchange to follow the lines of natural trade.

CLEARING-HOUSE AND DOMESTIC-EXCHANGE FUNCTIONS OF THE FEDERAL RESERVE BANKS [1]

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THE proposed plan to reform the American banking system presents a number of interesting and difficult problems. Few of these deserve more serious and thoughtful consideration, and none appear to have received in public discussions of the pending bill less attention than those involving the domestic-exchange and clearing-house functions of the federal reserve banks. For the most part, the problems presented are new. They arise from an intricate combination of the powers and provisions contained in the bill which have not heretofore existed in banking practise anywhere. Their solution, therefore, must be worked out slowly in the light of experience yet to be gained.

This is particularly true of questions relating to the exchange functions of the proposed regional banks. Many unsuspected difficulties may, and doubtless will, present themselves. Much uncertainty is occasioned by our inability to determine in advance the extent to which the federal reserve system will be supported by existing banks, and especially what classes of banks will lend their support.

No vital principles of banking would be violated in granting the proposed functions to regional banks respecting the clearance of checks. Indeed, the plan seems to be a timely attempt to extend in wider circles certain useful principles already thoroughly established and approved. If a practical way to accomplish this object could be found, great economic benefits no doubt would be derived by commerce and be shared by members of the federal reserve banks through the application of the clearing principle to country-wide checks, instead

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

of having that invaluable aid to business limited as it is now to use in particular cities and in restricted localities. But the two practical difficulties in the way of a universal extension of the principle are the questions of the costs involved and of the place where the burden of these costs shall be laid. Bankers for years have faithfully studied the question, and have found no satisfactory solution except by applying the clearing principle in a limited way within nearby and easily accessible regions.

When clearing houses were first proposed many objections were made and strongly pressed against the method of swapping checks, which is, in effect, the principle of offsetting debts one against another. Difficulties were overcome gradually, and dangers and possibilities of abuse were reduced by the adoption of rules which grew out of experience, so that now, although the total volume of clearings is enormous, the risk is practically *nil*. Certainly the losses actually incurred in handling so large a volume of business through clearing houses are very much less than would be the case were settlements made in cash. Probably in this country ninety-five per cent of the total volume of business settlements is effected by checks. Certainly the settlements of balances resulting from clearings do not as a rule require more cash than five per cent of the total amount cleared. Consequently, in all centers where large payments are made, settlements through clearings are of much greater utility than would be the use of money itself, and quite as indispensable. It follows, therefore, that if the costs of extending this principle throughout the country be not so great as to become prohibitive, and if the burden of these costs can be justly distributed, all good reasons for opposing an extension of the idea to checks other than local will be removed. But it is a far simpler matter to make this statement than to suggest the means for its accomplishment.

Here it may be well to draw attention to the distinction between offsetting a debt as accomplished through clearing houses and the actual payment of that debt. The passing of items through the clearing house does not constitute payment. All items cleared are under the rules returnable within time

limits. This must be allowed for a number of reasons. Actual payment of an item does not take place, and cannot be considered to have taken place, until that item shall have been received at the paying bank and sufficient time allowed to examine the check and endorsements in order to determine whether or not they are correct and the check is good.

In order that we may have clearly in mind during this discussion the apparent intentions of the framers of the new bill respecting the clearance of checks, the extension of the par privilege and the classes of items which shall be included, it may be well to quote in full the portions of the bill as written relating to domestic exchange and making provision for the exercise of clearing-house functions by the Federal Reserve Board and for the delegation of these powers. They are:

(1) It shall be the duty of every federal reserve bank to receive on deposit, at par and without charge for exchange or collection, checks and drafts drawn upon any of its depositors or by any of its depositors upon any other depositor and checks and drafts drawn by any depositor in any other federal reserve bank upon funds to the credit of said depositor in said reserve bank last mentioned, nothing herein contained to be construed as prohibiting member banks from making reasonable charges to cover actual expenses incurred in collecting and remitting funds for their patrons. The Federal Reserve Board shall make and promulgate from time to time regulations governing the transfer of funds at par among federal reserve banks, and may at its discretion exercise the functions of a clearing house for such federal reserve banks, or may designate a federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks.

(2) Among the powers of the Federal Reserve Board specially enumerated is the following:

To perform the duties, functions, or services specified or implied in this act.

The powers here conferred are ample and exceedingly broad. They are so sweeping that the Federal Reserve Board

may at its pleasure assume either directly or through federal reserve banks a large part of the clearing-house functions of the whole country, so far as member banks are concerned, and thereby reduce all existing clearing-house associations to minor organizations for clearing the remaining volume of checks on banks not members of the system. Elsewhere in the bill the intention seems clearly to be implied that this shall be done. At least, we find that the power of clearing houses, which has been so effectively invoked to stop panics through the use of clearing-house loan certificates, is to be abolished. The intention seems clear that each federal reserve bank shall effect for its own members the free clearance of all checks and drafts drawn by individuals and others on a member bank, or drawn by a member on itself or on another member, and also the same classes of items drawn by any bank located in any other district on the federal reserve bank of its own district. This would include, and cause to circulate at par throughout the country, practically all classes of checks and drafts in common use for making trade payments, except those of three kinds. These are:

(1) Checks drawn on banks not members of any federal reserve bank.

(2) Checks circulated by individual depositors and drawn on banks in other federal reserve districts.

(3) Checks drawn by a member of one federal reserve bank on a member bank in another district.

In the practical operation of the plan the heavy discrimination here made against these three classes of checks would cause them soon to disappear. Easy means, however, would be found to evade the discriminating charges in the cases of classes 2 and 3, while in the case of class 1 non-members of reserve banks might and would arrange to draw their checks on other banks which were members, and thus secure at least within the districts of their location the free clearing privilege.

For all practical purposes, therefore, we may consider that it is the purpose of the bill not merely to facilitate clearing of checks between the members of a district federal reserve bank, but also to relieve commerce as a whole of tolls in the

way of exchange charges heretofore imposed by the banks and found by them to be necessary because of the costs involved in handling the business. This inference is further warranted by the fact that it is made the duty of the federal board to promulgate regulations governing the transfer of funds at par among federal reserve banks.

The exception permitting banks to make reasonable charges "to cover actual expenses incurred in clearing and remitting funds for patrons" is comparatively unimportant and relates, of course, to shippers' drafts and similar documents drawn in the course of the collection of trade debts. These instruments are not circulated or employed in making trade payments. Under this permissive clause exchange charges could be extended, at most, only to include collection items and drafts on correspondents in other cities sold by the banks over their own counters. Under the proposed plan, however, drafts of the latter class necessarily would quickly disappear. Their place would be filled by cashiers' checks or drafts drawn by members on the federal reserve banks, because these instruments would serve the same purpose and would, of course, be free of exchange charges.

If the saving of exchange tolls on trade, which in the aggregate amount to an enormous sum annually, can be effected through the machinery of regional banks, and if the business can be cleared as expeditiously as it is now handled, and if the federal reserve banks shall be able to absorb and bear the costs which will fall upon them, the plan should be made effective by all means, despite the opposition of individual banks or of any sectional group or association of them. It will be found that opposition to the plan will not come from banks located in reserve and central reserve cities. All such banks will rejoice at the proposed undertaking. The contention which the city bankers have steadily made, that they have struggled with this problem in good faith, that they have always handled the business at a loss, or at least with returns entirely incommensurate with the amount of labor and risk involved, will quickly be demonstrated. Insurmountable opposition may be expected from country banks, because of the

taking away from them of the imposition of exchange charges. This has long been a source to them of legitimate and well earned revenue, and they should not be called upon to give it up. I cannot state the fact more plainly than by saying that if free clearance of checks be forced upon country banks they will not, in my opinion, join the federated system. These bankers may be mistaken in their views, but they will first have to be shown how they shall be relieved of their burdens before they can be expected to assent to free collections and the absorption of the costs to them involved. It should be borne in mind that the burden falls upon country banks, and to a very large extent also upon banks in ordinary reserve cities, of paying the cost of shipping money back and forth seasonally. The country bank pays the express tolls and loses interest on money in transit outward, when currency is needed in the interior, and back again to the reserve cities when the currency movement reverses. Banks in ordinary reserve cities at their own expense perform the same service in and out from larger centers. In all agricultural regions, where the supply of cash is insufficient for the seasonal needs, the banks are obliged to transport the necessary funds in large amounts. Take the movements of cotton during the active season—small banks are required daily to pay out in many cases an amount of cash greater than their capital stock. This money is moved at their own expense. They are at the same time required to receive and give credit daily for drafts against cotton shipments. These drafts are credited and the proceeds are thus made subject to check, the bank being obliged to make cash payments against them. The drafts are carried as "exchanges in transit" until they reach a larger central point, and there they are credited to the interior bank, against which further currency may be drawn. These operations involve large credit risks as well as large actual cash outlays. For both of these items a local bank is entitled to reimbursement. The services are indispensable to the crop movement. The splendid manner in which the country banks have supplied this service from year to year has become so much a matter of course as to attract no attention and elicit

no praise. The only way in which the country bank is able to reimburse itself for these heavy burdens is, under the existing scheme, to compel the producer or tradesman who needs to have the money brought out from centers to absorb the transportation charges by paying exchange on the drafts which he deposits for collection and credit. Later on, the merchant, whose needs in the payment of purchases cause this self-same money to be sent back again to trade centers, must be required to pay that cost in the way of exchange on drafts purchased by him.

This is the reason why the interior merchant prefers to use his check on a home bank. He thus evades the cost as well as gains time to meet the check. The country bank does not object, because its rightful charges are deducted when the check is presented eventually and remittance made for it. The city bank is obliged in the end to absorb the charge or throw it upon its depositor. While admittedly a desirable thing to be accomplished, it will be seen that the proposed plan to throw this burden at once upon the federal reserve banks without first knowing and carefully counting the irreducible cost, would constitute a risky experiment. This burden might be so great as to absorb the net earnings of federal reserve banks and even to involve the integrity of their capital.

The cost of the physical transportation of money is increased because of the wide extent of the producing regions of this country geographically and because of the annual ebb and flow of currency to meet seasonal requirements. The movement is a natural one, and while the burden of it may be shifted in the manner proposed, a certain fixed cost cannot be escaped either by legislative enactment or by human ingenuity. It is as much a necessary item of expense as is freight paid for transporting merchandise, and like it, must fall somewhere. Trade practise naturally and very properly has placed it upon the recipient of the benefit.

If we could have one central bank with numerous branches, the cost of effecting not only the normal currency movement, but also the universal clearance of items of the classes named

might be so greatly reduced as to become negligible by resorting in the case of checks to book entries made at the head office and affecting the accounts of branches. Such entries would of course affect the reserves of the member banks concerned, but they would not affect the reserve of the federal bank itself, every liability created by the deposit of a check being immediately offset by a corresponding debit to the account of the drawee. It would not matter, either, in the case of currency movements, if there should be an accumulation of funds at one branch for a considerable time. There these funds might remain and be counted as reserve quite as well as if they were held at the head office. Neither would it matter if a large amount of bank notes should be presented for redemption at a branch. Such notes could be redeemed, retired and held on hand at the branch without cost or transportation charges until they might again be required. This economical arrangement cannot be established where there are twelve independent units in the system, each struggling under the necessity always of maintaining its own equilibrium of reserves and liabilities. In the case of every federal reserve bank, should a system of inter-district clearings be attempted, the actual transportation of reserve money back and forth would become inevitable. At first, the plan might be tried out in a limited way between the members of a single regional bank, all of which necessarily maintain balances at the reserve bank. With a federal reserve bank as the center, and with the banks constituting its members taken as a whole, the organization might be considered a miniature or localized central banking system, wherein the principle of clearing might easily be applied successfully amongst the members. But even such an arrangement, although apparently both practicable and just, would be greatly to the advantage of city banks, and decidedly to the disadvantage of country banks.

However, it is not a matter of profit and loss to the member banks which is to be considered so much as it is a question of the practicability from the point of view of the federal reserve banks themselves, and of the means by which, if at all, the business can be undertaken by them and successfully carried on.

In view of the position of the country bank, which I have endeavored to state clearly, it would seem that the plan must be made sufficiently attractive to induce the interior banks to support it. Certainly, without their support in large numbers the scheme would fail, because the volume of business to be collected is so large that the existing scale of exchange charges could not possibly be absorbed by the federal reserve banks.

The considerations raise the following questions:

I. How shall the objections of the country banks fairly be met? How shall the costs they now bear be so shifted that the country banks may be able to support the plan?

The provision that these banks shall be allowed to charge exchange on documentary drafts and collections is good, and it is abundant to take care of that portion of the business. In addition to this, however, all transportation charges on bank notes to and fro, for whatever purpose shipped, should be borne by the federal reserve banks. Under the law, the reserves maintained at federal reserve banks may not be distributed, in any event. In consequence, it will become necessary, if the proposed plan shall be made effective, for every member in providing funds for clearing checks through its regional banks to maintain much larger balances than mere reserve requirements demand. The maintenance of these increased balances will involve either their borrowing at federal reserve banks or decreasing their loans at home, and consequently this cost might fairly be offset by the free transportation of bank notes. Finally, interior banks should be permitted to carry at least one-third of their required reserves permanently with reserve agents so as to entitle them to receive the benefits of special reciprocal arrangements which will be effected by nearly all banks in reserve cities with those in other reserve cities for the clearance of checks drawn on non-members of regional banks. Arrangements of this kind, where not already existing between banks, will become necessary in any event. Such inducements as are here suggested, coupled with the advantage of speedy conversion of current checks into reserve funds, and the fact that the maintenance

of reserves would become easier and the lending power of the banks be increased in consequence, would bring into the system nearly all the interior banks.

II. The second and equally important question is, how these concessions, if granted, will affect the federal reserve banks.

The estimated normal annual movement of currency from reserve centers to the intrior for crop-moving purposes is between $200,000,000 and $250,000,000. The movement varies according to circumstances. The return movement at seasons' ends is substantially the same, so that the total movement to and fro is approximately not less than $400,000,000 annually. The average cost of transporting currency by express for all distances in this country is probably about forty cents per thousand dollars. Making allowance, however, for short hauls, and for shipments of currency by registered mail under insurance, the cost of transportation may be conservatively estimated at twenty-five cents per thousand dollars (exclusive of interest on money in transit). This would amount, therefore, to an annual minimum charge on the federal reserve bank — if it should assume these charges — of not less than $100,000. Let us suppose that twice as much more currency should be moved back and forth in the course of a year by members located in manufacturing and industrial centers, for pay-rolls, exchange and reserve purposes, at an equal average cost. Then we should have a total yearly expense incurred by federal banks in currency movements of not less than $300,000. If this were the end of the matter, such a charge would be of no consequence and could easily be absorbed. But a far heavier burden would lie in the cost of handling the items collected. This involves labor, postage, stationery and, in the case of checks on other federal banks, loss of time (which is usually expressed by banks in terms of interest for the average number of days required to receive returns). In clearings between the members of a district alone, no such loss of time would be incurred; but in inter-regional clearings the interest loss actually suffered would be measured by the gold reserve required to be carried against the credit balance

created by the deposit in one regional bank of checks on other regional banks. It is difficult to compute this cost, but it would be very heavy unless each federal reserve bank should be permitted to have an account with every other such bank, and to offset the balances " due to " and " due from " other regional banks before computing their required reserves. This, of course, would materially reduce the cost of inter-district clearings. But, it would be open to the same objections, if not to all the abuses of the existing practise of " double-headed" accounts between individual banks.

Fourteen years ago, after careful investigation, the New York clearing-house association ascertained the actual cost to its members of clearing out-of-town checks or, as they are now called, " inland exchange." A schedule of charges estimated then to be sufficient to cover the actual cost, but no more, was adopted and under penalties was made obligatory on all members. Certain nearby cities and towns were placed on the discretionary list, which meant that the members of the clearing house should have the privilege either of exacting a charge or of clearing checks on such discretionary points free; and as a result, in actual practise checks on all discretionary points (except under most unusual circumstances involving very large amounts) have been handled free. Charges of one-tenth of one per cent (one dollar per thousand) were imposed upon checks drawn upon banks within a region roughly defined as that part of the United States east of the Mississippi and north of the Ohio; a charge of one-quarter of one per cent (two dollars and a half per thousand) was imposed on checks drawn on banks west and south of the territory named. The plan worked satisfactorily and with the exception of special interpretations and rulings made by the clearing-house committee remained unaltered for thirteen years. During this time, naturally, the volume of business largely increased, new and better methods were adopted in the handling of collections, mail and transportation facilities were improved, so that it appeared to the members of the association early last year that the time had arrived for a careful investigation of the whole subject, with a view to a revision of the schedule of charges if it should be found desirable.

A committee was appointed for this purpose in April, 1912, began its work immediately, and continued without intermission for six months or more. The members of the committee approached the subject with open minds, and after procuring all necessary data from the members themselves and having the presidents or other officers of member banks before them, as well as receiving deputations from bankers' associations of nearby states and from neighboring cities, reached their conclusions and made a report showing that the gross volume of out-of-town checks cleared by members of the New York clearing house for the year 1911 was approximately $4,859,187,900; that the gross income of the members from exchange and collection charges imposed on the business handled was $2,139,551. From this there was deducted exchange paid to other banks, amounting to $1,176,162; cost of postage, rents, stationery, salaries, *etc.*, $569,461.78; estimated loss of interest (through giving in special cases immediate credit for items in process of collection) $296,460; total costs $2,042,083.78; net income, $97,467.22, which, distributed between sixty-four active members of the clearing house, represented an annual increment of income to each of about $1,500, or an average of about two cents per thousand dollars. The report also showed that of the total volume of out-of-town checks handled by the members, 71 per cent was drawn on the discretionary or free points; 24 per cent on points costing $^1/_{10}$ of 1 per cent, and only 5 per cent on cities involving a cost of ¼ of 1 per cent. It was further shown that the average time consumed in the collection of all inland checks, including those on the free list, was 4.19 days. This time varied from 2.95 days for Washington, D. C., and 3.24 for Baltimore, all the way up to 8.93 days for Los Angeles, 8.92 for Seattle, and 9.40 for San Francisco.

As a result of these painstaking and thorough investigations the sub-committee found that the existing scale of charges certainly did not do much more than bring the banks out without loss, even if that were done; and they consequently reported that the charges were not excessive. They recommended that the main body of the rules and regulations of

the clearing house in respect to exchange charges outside of New York city remain unchanged. They suggested, however, that within certain restricted territories easily accessible to New York, and for reasons which in each instance were peculiar to the areas involved, the rules should be modified so that outside of the discretionary points already existing all banks and trust companies in the states of Massachusetts, Rhode Island, Connecticut, New Jersey and New York which should engage themselves to remit to the members of the New York clearing-house association at par in New York funds, on the day of receipt of the items, should likewise be placed on the discretionary list. The report was adopted and the new rule went into effect.

As evidence that the interior banks were better satisfied with the old arrangement, it may be stated that out of a total of 1,827 banks located in the new discretionary region only 306 thus far have availed themselves of the privilege afforded for the free circulation of their customers' checks in the city of New York. It is only fair to make the statement, however, that the interior banks concerned insisted that the New York clearing house should adopt the Boston system, so that they should be obliged to make only one par remittance, and that to the clearing house daily, instead of making numerous separate remittances to individual members of the clearing house. This is where the rub came, and their contention is not without merit. Nevertheless, it appears that the average interior bank prefers to make its own arrangements with New York banks whereunder it shall make remittances, and to stipulate its own tolls, rather than have the checks of its customers circulated free under conditions that involve labor and expense to the bank. This, no doubt, is a fact, and it would be no less true were the terms imposed by a federal bank instead of by associated banks. The interior banks will not absorb the cost in either case, nor can they afford to do so without reimbursement in some form.

It will be seen from the foregoing figures that the average cost to New York banks of collecting out-of-town checks is about forty-two cents per thousand dollars, including, of

course, checks on discretionary points which actually were handled free. By far the greater part of this cost is represented by exchange and collection charges imposed by interior banks. This amounted during 1911 to $1,176,162, or an average of about 24 cents per thousand on all checks collected. If checks on discretionary points be excluded, and only those be considered on which the New York banks themselves imposed an exchange charge, then the average cost would be $1.45 per thousand. For our purposes it is correct to include the whole volume of business handled, for in no other way can we arrive at a fair estimate of the cost of handling such items by the federal reserve banks.

Under a widely supported system of regional clearings the exchange item of costs could be very greatly reduced and probably nearly eliminated. For our purposes we shall consider that it is entirely eliminated, leaving only loss of time and the cost of what might be termed "overhead charges," including the operation of the business. The time loss in the case of New York banks amounts to only about six cents per thousand dollars, because for the most part, although credit is immediately given, interest is not paid on balances until the items deposited have been collected. In the case of regional banks, this charge, if considered at all, would be higher because of the larger reserves of gold required to be carried against deposit liabilities. It would amount probably to eight cents per thousand dollars. But this charge could be eliminated by permitting each federal bank to offset balances due "to" and "from" other federal reserve banks before computing its reserve. If these two items of cost should be thus removed there would remain the single item covering labor, postage and stationery, and this would constitute the irreducible minimum, which in the case of New York banks is approximately twelve cents per thousand dollars, and in the cases of certain large banks, as much as fourteen cents, by actual tests.

The experience of New York banks, as revealed by the investigations of the inland exchange committee, was surprising in that the average cost of collecting inland checks apparently

had not been reduced within thirteen years, although the banks employed more efficient methods and enjoyed the advantages of more rapid transportation and better mail facilities. Apparently these advantages were about evenly offset by the constantly increasing scale of exchange charges imposed by interior banks and the increasing volume of business handled, despite the restraining influence of the charges imposed by New York banks. The charges collected by interior banks began to increase in 1898, when a stamp tax was imposed on checks, and these charges have continued steadily to increase. The rule among interior banks is to impose a minimum charge per item in the case of single items, regardless of the amount involved, and also a minimum charge of so much per hundred dollars where several checks are involved. The result is appreciably to increase the average cost of collection of checks per thousand dollars, because the average trade check is much less than that amount, while during the period under consideration the established scale of charges imposed by the New York clearing house remained at a fixed rate per thousand dollars. Outside of its own members, this is a condition against which every federal reserve bank would soon find itself contending in respect of inter-district clearings, and one which the Federal Reserve Board would find much difficulty in regulating at par without preparing to absorb heavy costs.

We have made reference to the system which is in effect for the handling of New England checks in Boston by a bureau attached to the clearing house. In this system we find as near an approach as could be imagined to the actual working conditions under the most favorable circumstances which could exist in a federal reserve bank clearing checks for its own members only. It may be well, therefore, to describe the system as affording a practical example of the lowest attainable overhead charge in handling checks on numerous banks in a small and densely populated region.

Briefly, under this system all checks on New England banks are received by Boston banks at par. They are (or may be) collected at par through the clearing house, where the checks are received, recorded and forwarded for collection to the

banks on which they are drawn.[1] The checks are remitted for at par, credit being given the members of the Boston clearing house in the clearing on the second day following the despatch of the items. Interior banks are permitted to make remittances at par in New York exchange, if more convenient; or they may ship currency, when necessary, at the expense of the Boston banks. The system has been in effect for a number of years, and works with perfect satisfaction to all concerned.

The cost of handling checks in this manner is figured on New England items only to be approximately seven cents per thousand dollars. This is exceedingly low, and there are several reasons of a special nature for the allowance of so low an estimate. These reasons are not applicable generally among banks, and would not be in the case of a federal reserve bank. Several of the larger banks in Boston estimate that the actual cost to them is approximately nine cents per thousand. Despite the manifest advantages offered by this system, and the exceedingly low costs obtained, the fact remains that less than ten per cent of the total volume of New England checks received by Boston banks is handled through the clearing house. The competition among Boston banks for the reserve accounts of interior banks compels them to handle ninety per cent of the business directly through their own correspondents, on terms of course more favorable to the interior banks than the clearing-house arrangement. Assuming, from the estimates of the larger banks, that the cost averages nine cents per thousand dollars, it will be observed that this is within one cent per thousand dollars of the actual net cost experienced by New York banks on all checks. This, beyond doubt, is very near—as near, in fact, as it is possible to calculate—the irreducible minimum of overhead charges in handling inland exchange.

Inquiries made by wire to all reserve cities of the United

[1] The advisability of sending checks to the banks on which they are drawn is open to question from a legal point of view, but it is universally done among banks, and with no greater risks than if sent to other banks, except in the legal risk assumed.

States for information of a nature similar to that upon which the figures for New York and Boston are based have brought to hand a mass of reliable data sufficient to confirm the substantial accuracy of the estimated cost of handling items by banks of the whole country. I am convinced that the experience of New York banks, and of those in Boston, Philadelphia, St. Louis, Chicago and all other central reserve and reserve cities, constitutes a fair basis for estimating the cost of handling this business as it necessarily would be conducted by regional banks. In all cases where the same or similar methods of computing the costs are employed, there is remarkable uniformity in the percentage which the daily total receipts of inland items bears to the total deposits of the banks in those cities; and also in the average time required to receive returns on inland checks, and consequently, also, in the relative proportion which the totals of the accounts carried by the banks representing "cash items in process of collection" bear to the total deposits of the banks. There is likewise surprising uniformity in the estimated fixed amount of overhead charges. Wherever discrepancies appear they invariably incline toward very much greater, and never toward less, costs than those here estimated. I am of the opinion that for a time at least, and perhaps for many years, the regional banks could not effect collections so cheaply, except between their own members, as the banks now do through private reciprocal arrangements made on a large scale. The estimated cost, therefore, to the regional bank is probably under, rather than over, that which would actually be incurred in such operations. A large volume of checks is handled by trust companies in the reserve cities and by many banks in smaller places (data of which are not accessible) through special reciprocal arrangements. Such arrangements consist of the mutual exchange of checks within certain territory or of checks drawn on certain specified points which are handled at par; the use of "double-headed" accounts; balances carried by one bank with another bank free of interest; the remittance of accumulated balances at par in exchange on central points at stated intervals; and the employment of various other schemes in-

volving an evasion of direct charges and outlays in the way of exchange paid, but entailing, nevertheless, cost in some form. Leaving these out of account, we may safely estimate that the minimum cost of handling inland checks (other than local checks which pass through clearing houses) excluding the time equation and actual exchange paid (which items the regional banks might possibly escape in the manner already shown) would be not less than ten cents per thousand dollars; that the average time required to receive returns would be not less than 3½ days on nearby points (24 per cent of the total) and 5 days on more remote points (5 per cent of the total); and that the total volume of items always afloat would be not less than 5 per cent of the total deposit liabilities of the banks.

Without going into a bewildering maze of figures, it will be seen from the foregoing data that the actual cost to regional banks, if each such bank should undertake to assume the clearing of checks among its own members, and each also to clear checks drawn directly on all other regional banks, as is contemplated in the proposed bill, would be approximately as follows: Total deposits of the banks of the United States (state and national), $17,000,000,000. Five per cent of this amount would be $850,000,000, representing the amount of unpaid items always outstanding. The average time to collect being not less than 4 days, all inland items included, we estimate $212,500,000 as the daily average amount of "inland" checks which would be received and credited by federal reserve banks; or an annual total (figured on a basis of 300 business days a year) of sixty-three billion, seven hundred and fifty million dollars. On the low basis of ten cents cost per thousand dollars this would amount to an annual cost to the federal reserve banks of $6,375,000 in actual overhead charges. To this should be added at least $300,000 annual expense for movements of currency. Even these enormous charges take no account of the actual bookkeeping and clerical costs involved in effecting the clearance of purely local checks between members such as that which now takes place through clearing houses. In the aggregate, the amount of these clear-

ances is very much larger, but the clearing cost would be inconsiderable. Among all the proposed federal banks the total would probably not amount, in actual cost for clearing local checks, to more than $2,000,000 additional, or to a total for all clearances and charges of $8,675,000, or 4.17 per cent annually upon the total capital of the federal reserve banks if every national and state bank in the United States should join the system. It should be remembered, also, that the volume of business cleared through the regional banks would speedily be increased, and that this enormous charge would be multiplied for three compelling reasons:

(1) The quick convertibility of current checks into lawful reserves.

(2) The removal of the necessity now existing for reciprocal arrangements between banks for any checks except those on non-members, and the diversion of the great volume of business thus handled from present channels into the federal reserve banks, for reserve reasons.

(3) The natural inclination of every person to ride a free horse.

Even the government itself would suffer in its revenues because of the easy availability of free exchange as against the cost of postoffice money orders, and the readiness with which individual checks could be negotiated at par in the trade centers of every federal district. The enormously increased use of checks and their free circulation would, of course, correspondingly decrease the requirements for bank notes. Wherever a check is used it displaces or, rather, satisfies a temporary need for the actual use of an equivalent amount of currency; and if the use of checks be free, the incentive is, of course, to use checks. Consequently, in exactly the ratio in which federal reserve banks made possible the free use of checks, those banks would be working against their own interests and depriving themselves to that extent of the opportunity to keep their notes in circulation. The natural tendency, and probably the ultimate result, of the proposed plan if the federal reserve banks should assume on a large scale the clearing functions would be to make that particular function the

chief business of the federal reserve banks; and, naturally, as in the case of existing clearing houses, that business would be conducted for the convenience of the members and not for or at a profit.

The conclusion, therefore, seems warranted, that, however desirable in theory the proposed plan may be, however beneficial it might be to individuals, to trade in general and to the members of the federal reserve banks in the large cities, it is impracticable, its cost to federal banks prohibitive, and its operation contrary to the interests of the small interior banks. The scheme should not be enforced against those banks unless the concessions suggested shall be granted them.

Finally, the plan is not to be commended because it would tend to relieve trade generally, and individuals in particular, of the burden of paying a fair compensation for the use of credit, which is a trade facility and a trade necessity. The use and enjoyment of these necessarily entails a cost somewhere for benefits supplied and for services rendered. If this burden shall be assumed by the federal reserve banks, the cost, or a large part of the cost, in the end will fall upon the government itself, and will be reflected in the reduced profits derived by the government from the operation of federal banks.

So far as the trading public is concerned, no necessary or desirable economic end will be attained through the establishment of a free system of collecting checks. In the interest of trade, the abolition of fair exchange charges—those now imposed do not seem to be unfair or excessive—and the substitution of an unlimited use of checks to be cleared free by regional banks, is no more desirable or necessary, or in fact, more practicable, than would be the free extension of credit and the abolition of interest charges. One is as logical as the other.

I may say that a strong objection to the plan lies in the fact that under it inflation of credit is possible through kiting of checks; [1] for every check deposited in a regional bank and

[1] "Kiting" is the mutual exchange or loan of checks between two or more individuals or corporations, whereby temporary credits may be enjoyed through fictitiously created balances.

drawn on another regional bank, or deposited by one member of a regional bank on another member of the same regional bank, becomes at once convertible into reserve money and may be so computed irrespective of whether such checks on presentation shall prove to be good or not, or whether the credits were created by "swapping checks." This indeed approaches, if it does not go beyond, the limit of even problematical soundness in the theory of banking.

FOREIGN EXCHANGE PROBLEMS AND THE PROTECTION OF OUR GOLD SUPPLY[1]

JOHN E. GARDIN

Vice-President, National City Bank

THE most serious problem confronting us to-day in our international relations, particularly in view of the pending changes in our banking system, is the protection of our gold supply.

During the course of the year, the country was startled by announcements that gold was being taken for France in blocks of two million dollars at a time. This continued until something like a total of $36,000,000 had been exported. The exchanges were ½ to ¾% below the gold export point, and the question arose how it was possible to export gold under such conditions. The answer always was that it was a special transaction, which is simply a generic explanation of anything that one knows nothing about. The truth of the matter, however, was that the Bank of France was fortifying its position and was buying the gold in this market, just as a merchant would buy potatoes, cotton or any other commodity, and paying therefor a premium expressed in the rate of exchange.

This reveals a weak spot in our system and one that should properly be covered, in order to protect our gold supply. It would be fundamentally wrong to place undue restrictions upon the flow of gold when used in the settlement of international balances, but it is perfectly proper to have a system of brakes, capable of being applied in order to prevent the wheels from going too fast.

The United States is the only absolutely free market for gold in the world, and we have to suffer for our liberality. When South American exchanges are against Europe, the

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

burden is thrown upon us; this applies also to the exchange relations of France and England, and we have no remedy.

If conditions are normal and exchanges are against us, it would be neither wisdom nor good business policy to place any restrictions upon the export of gold at all, but if we can see that an export of metal under such circumstances would still further aggravate an already strained condition, it would be perfectly proper to apply the brakes, particularly so as recent legislation has made it easier to obtain bars than formerly. How to do this is the question. We could add a premium to the cost of the bars, but this premium could not be placed higher than ¼%, as that is about the difference between bars and coined gold.

This premium could be made on a sliding scale with a maximum of ¼%. This is about the limit of arbitrary action. Of course, all this is predicated upon a legitimate export demand on the basis of exchange rates. If the demand, however, is an arbitrary one, such as recently took place in connection with gold shipments to Paris, the President of the United States should be empowered to proclaim an export duty on all gold exports unless it can be shown that the export is taking place strictly on the basis of prevailing exchange rates. This power probably would never be invoked but it would have a deterrent effect.

The best protection for our gold supply on the part of the central reserve association is to hold a foreign portfolio, and this feature has wisely been recognized by the framers of the bill. The value of this protection cannot be overestimated. A further means of protection would be the extension of the privilege of the banks of this country to accept time bills drawn on the basis of domestic commercial transactions.

Provision has been made in the law, as it is now laid before Congress, to permit banks to accept time drafts having as a basis commercial transactions covering the importation or exportation of merchandise. This power is of no value whatsoever as regards exports and it will be used only to a very limited extent as regards imports, owing to the fact that there is no regular market for American exchange in foreign countries except in the principal financial centers of Europe.

The privilege of accepting time drafts based on domestic transactions should be freely granted. Such a privilege would add to the means of protecting our gold supply along natural lines. At times, when the balance of trade is against us and their own needs are not pressing, the European banks, with discount rates and exchange rates favorable, would gladly take good bank paper into their portfolios and thus relieve us of an unnecessary exportation of gold. They would use this American paper as a protection to their own holdings just the same as we would hold our foreign portfolio, and in this way there would be established an exchange market for American remittances, which market would gradually spread throughout the world. It will be years before such a thing can be brought about, but there is no reason why a ninety-day bill, drawn on New York, should not command as favorable a rate of exchange as a ninety-day bill on London. With gold at the export point and discounts obtainable at a very high rate of interest, an investment in prime American bills would be an attraction that very few foreign banks could resist.

Several years ago a law was passed, authorizing the Treasury Department to retain as bullion foreign gold coin coming into the country. This privilege should be extended to the banks of the country, authorizing them to count such coins at their minting value in their reserve.

We should also follow England's example and abolish our usury laws as far as they relate to commercial transactions. I would recall Jeremy Bentham's famous epigram that brought about that wonderful reform in mercantile life which made Great Britain the greatest commercial country in the world.

The production of gold during the last four years has remained practically the same but there is every indication that it is on the wane. This is a very serious problem that confronts us, inasmuch as we are absolutely dependent upon that metal as the basis of credit. We may be a wealthy nation but wealth alone does not produce fast enough. Consequently, we must have credit to supplement wealth, and credit must be based upon a generally recognized value, and that is gold. The principal danger to our gold supply is the enormous absorption in the arts and industries.

It is estimated that during the last fifty years over $3,000,000,000 worth of gold has disappeared, East India alone during the last twelve years having absorbed $500,000,000. Egypt also absorbs a great deal. The average annual consumption of the arts and industries is, according to the estimates of the director of the mint, about $175,000,000. This would leave an annual supply, if it continues the same as at present, of only $286,000,000—not enough for our needs. On the generally accepted ratio of credit to capital, of five to one, this would mean that $875,000,000 worth of credit is destroyed. To what extent we are in need of capital can be inferred from the requirements in this respect of London alone during the last nine months. London is estimated to have needed $750,000,000 for new work. No estimate is made of the requirements of Germany, France, the United States, Canada, Brazil, the Argentine or Africa, but they must be enormous. Hence the question comes foremost in our mind —where is the capital to come from? It is absolutely necessary that our store of gold be jealously guarded and that it be used only in payment of our just debts.

A further feature must be borne in mind in connection with this subject, and that is the danger of the invisible balance of trade, which is always against the United States. This invisible balance is variously estimated from $500,000,000 to $2,000,000,000, and up to the present time the deficiency has been made up by investments of foreign capital. When this country ceases to be an attractive field, which can very readily happen now that new domains are being exploited in Europe, Asia and South America, the danger will then become imminent. Should China, with its four hundred million inhabitants, ever go on a gold basis, then may the Lord have mercy upon us!

From the foregoing it is evident that we must have a scientific system of protection for our gold supply, but never for a moment must we lose sight of the fact that our just debts have to be paid in gold.

ACCEPTANCE AND FOREIGN BRANCH POWERS UNDER THE PROPOSED FEDERAL RESERVE ACT[1]

JASON A. NEILSON

Brown Brothers

IT is venturesome to offer a decided opinion of the manner in which the foreign exchange functions would work out under the federal reserve act of 1913. The ordinary citizen who is but a casual observer and who has taken no intimate part in the actual framing of the law finds some parts not clear. Remarks at this time as to these functions of the federal reserve or national banks will therefore be most useful if they serve to open real public discussion, to the end that the banker and the merchant may through study obtain a clearer idea of the intentions of the law makers and of the possibilities of financing foreign trade under the proposed law. Attention should also be given to the matter in order that decisions may be obtained from the Federal Reserve Board as early as possible after the banks have agreed that it is possible for them to work under the new law.

Aside from the measures providing for the protection of the gold stock, the bill revised to September 18, 1913, contains other foreign trade items in sections 14 and 28.

Section 14 reads:

> Any national bank may, at its discretion, accept drafts or bills of exchange drawn upon it, having not more than six months' sight to run, and growing out of transactions involving the importation or exportation of goods. No bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half the face value of its paid-up and unimpaired capital.
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> Upon the endorsement of any member bank, any federal reserve bank may discount acceptances of such (member) banks which are

[1] Read at the meeting of the Academy of Political Science, October 15, 1913.

based upon the exportation or importation of goods and which mature in not more than six months and bear the signature of at least one member bank in addition to that of the acceptor. The amount so discounted shall at no time exceed one-half the capital stock of the bank for which the rediscounts are made.

Section 28 reads:

Any national banking association possessing a capital of $1,-000,000 or more, may file application with the Federal Reserve Board for the purpose of securing authority to establish branches in foreign countries for the furtherance of the foreign commerce of the United States. * * * such application shall specify * * * the amount of capital set aside for the conduct of its foreign business at the branches proposed. Every * * * association shall conduct the accounts of each foreign branch independently.

The acceptance privilege, or borrowing power, granted national banks for foreign trade bills, seems to stand out as the key to the changes in our national banking system which bear upon foreign trade. Incidental thereto are (a) the facilities for the rediscount through the federal reserve banks of bills bearing such acceptance and (b) the foreign branch privilege. Other American banking concerns have possessed the acceptance privilege, but up to this time, national banks have been forbidden to incur contingent liabilities in a direct manner by lending their credit in this way. There is danger that some who are not familiar with the uses of this class of credit power may avail themselves of it in a way that will injure our present foreign trade credit facilities. They may also see a chance to open an office in London and sell their acceptance in sterling, thus competing with friends in a field already well covered.

If a merchant has access to first-class financial advice, he knows that at the present time imports of merchandise can be freely and economically financed by anyone in proper credit, by means of the sterling commercial credits system. There is no lack of facilities.

The use of these facilities, however, involves the use of London acceptances and in this connection it has often been

said that we should not have to pay tribute to English bankers for this service, but should perform it for ourselves.

Of course, American banks can establish branches under the new law in London and if they desire they can usually sell their acceptances in sterling to a limited amount, but the economy of such action is doubtful. On the average, this method would be at least as wasteful as the present system, and therefore, the country as a whole would not be benefited.

In order to get sterling acceptance business, such branch banks would have to cut the rate below that quoted by their foreign competitors. Experience has shown that the present rates quoted by the joint stock banks in London are the very lowest possible. In fact, it has been claimed that competition has made them unfair to the acceptor, and that the present level will have to be raised eventually. The risks of the business demand at least that no further concessions be made if stability, profit and safety are to be considered. Suppose, however, that an American importer succeeded in buying an American bank's sterling acceptance at a commission rate below the English bank's quotation. He would find that the seller of the goods would not get so favorable a price for the bill as he would if it were drawn on one of the prime English banks or the important accepting houses of England. The seller of the goods would therefore have to raise his price, include the loss in his invoice, or get the difference out of the buyer in some other way. Thus the buyer would really pay the full English commission in an indirect manner for a credit not so favorable.

The time bill in sterling on a branch of an American national bank in London, would not bring so good a price as a bill on an English name, not only because the world's traders do not know it so well, but also because the London discount market would look upon such as foreign bills, and would receive them usually at a higher rate of discount in only limited amounts, and quite often, in critical times, not at all. They would not be available for rediscount in the Bank of England, they would be handled simply on the basis of a loan, and the line of the endorser with the negotiator would be reduced accordingly.

Another reason why Americans as a nation should consider carefully the question whether or not they shall use their new acceptance privilege in any national bank branch established in London is that the price we as a nation pay for foreign capital under the existing acceptance system is an extremely reasonable one. If we had the power to take over to ourselves the present American business of this sort, would it be wise to do so? We are a growing nation, with need for foreign capital and with much in the way of undeveloped resources in our own land. Would not our invasion of the English market probably result in some restriction being placed on the present liberal lines of credit granted American banks and merchants by the London banks and discount houses? If so, it is of first importance that every effort should be made by American bankers and merchants to discourage any attempt to spoil the English acceptance business by means of cut rates, and to allow present relations in that market to remain undisturbed as far as possible.

On the other hand, some say that we could instruct sellers to draw in dollars on American banks in America, at say two, three, four or six months' sight, and not complicate matters by introducing another currency. In most of to-day's transactions, this would be working contrary to the great currents of trade and would be a handicap to our merchants. London is the clearing house for almost all the important international commercial operations of the world, occupying a position which is impregnable at present and which cannot be altered until the accumulation of a larger amount of capital at some other center has made a change possible. England's capital, which she has kept constantly employed in this business for many years, the volume of her foreign trade, her long established commercial connections and her reputation for conservatism, honor and fair trading, make sterling still the world's best commercial medium of exchange. The franc, mark and dollar exchanges are secondary, and while useful under special conditions, they do not always find the wide market that exists for sterling. Bankers and merchants everywhere have accounts in London, and deal in London funds. They figure more closely on sterling than they will

do on any other currency. Everybody everywhere knows the value of sterling. It is the most favorable of the exchanges and has the greatest stability. The minds of traders in all parts of the world have been trained to it for generations. The buyer and the seller in most places can get together on a closer basis through its medium than in any other way as things stand to-day, and until conditions radically change sterling is dominant in the world's trade. Other methods should be adopted to make the new acceptance privilege really serve the people of America.

Dollar acceptances are most promising from the viewpoint of developing a new field which will be permanent, on a fair trading basis, and truly our own. If they are ever to be received by the world on a high credit basis, they will have to be carefully introduced and their use will have to be properly restricted by the acceptors. The line of least resistance will be for us to try to conform with the customs of trading used by the rest of the world. If we find that our merchants can trade to advantage by the use of our dollar acceptance system, and that it has value in a certain part of the world, then we should introduce our system gradually in that part of the world and there only. We should by all means avoid any effort to force dollar acceptances. When the time comes that America has capital to spare from domestic enterprises for the financing of foreign trade, and when our position in trade in the world's markets is such that the men of other places think prices in dollars, when they have close relations with us, and when an active exchange market for dollars exists, then, but not until then, to any great degree, will dollar acceptances be economical and useful, and will find their field.

The real economic use for dollar acceptances will be found in financing trade with the countries in which dollars are the dominant exchange. The exceptionally long tenor of the foreign trade bills the federal banks will take, indicates that the framers of the bill have recognized this and have specially desired to help finance the long-time credits which our merchants have to give to meet German competition in Latin-American countries. These countries seem to be the most promising field in which to make dollars the dominant ex-

change, and here exists a chance to make a most satisfactory use of dollar acceptances, a use that will conform to the intention of the law makers and one that will be perfectly natural.

As to foreign branches — the spirit of these privileges is that such branches are to be established only where it is shown to the Federal Reserve Board that they will further the commerce of the United States. It would seem that the present method of reciprocal relations covers fairly well trade naturally clearing through Europe, but possibly a few of the largest banks may believe that their special interests make it desirable for them to have branches in London, Paris and Berlin. If such branches are conducted conservatively and for the good of the nation's trade, it may prove a difficult task to make them pay, inasmuch as reciprocal relations are partly destroyed and retaliation is invited. It is doubtful if many will find it worth while if they confine their activities to commercial banking.

The places on the American hemisphere, where our natural opportunities along this line appear to lie, will probably be ignored at first, and while branches might be useful in some of these places even at the present time, it is true that ventures in such countries are fraught with considerable danger when not manned by experts, and they should be entered into most carefully. There must be a good deal of business done by our merchants before it will be profitable to establish American banks in Latin-American countries. If there had been a quantity of profitable business in view, there are financial institutions already in existence who could have entered the field ere this, but few have done so.

The proposed acceptance and branch bank measures, therefore, may prove dangerous to our foreign trade if unscientifically used, but if they are carefully regulated by the Federal Reserve Board and confined by the national banks to their proper sphere of usefulness, they will work for good. It will take time to instal them in this way, however, and the present methods of financing imports and exports, which, after all, have a great many compensating advantages, will not change radically at once.

DISCUSSION OF DOMESTIC AND FOREIGN EXCHANGE RELATIONS

MR. JOHN PERRIN:

I should like to touch upon two points connected with the matter of internal exchanges, since they form the basis of the very strong objection on the part of country bankers to the acceptance of the provisions of this bill. That subject has been gone into here so thoroughly that I wish simply to raise two points that did not seem to be touched upon. In the discussion last week before the Economic Club in Boston, Mr. Samuel Untermyer made a statement that the profits of country national banks were seventy-two million dollars last year, of which about one-fourth came from exchange charges upon checks sent for collection and remitted. These charges, he said, constitute an unjust burden upon commerce. It is rather important to consider the exact ultimate result of such charges. I assume that the number of banks in the cities of the South and the West, and in sparsely settled districts generally, depends upon the profits which may be made in operating these banks. If they make one-fourth of their present profits from these exchange charges, then the result of doing away with the charges must be some liquidation of the banks, and less bank facilities for those sections that require them. At the present time those charges are absorbed largely either by city bank or city merchant. The ultimate consequences of the elimination, then, will be not simply the abolition of the charge which is now being paid by city banks and city merchants, but the lessening of bank facilities in country districts.

The other point was suggested in connection with the clear and searching paper presented by Mr. Talbert. In conversation with Mr. Butler, of the House banking and currency committee, I asked the question: "Is it to be understood that checks accepted for collection by the federal reserve bank are to be charged against the balances of the member bank?" He re-

plied, "I suppose so." How can a member bank in the interior know what checks are being charged against its balances? Each bank should have the right to take absolute control of its own balances. Under the proposed provision it would be required to carry a balance sufficient to meet unknown collection charges. Mr. Talbert's deduction that the plan would be impracticable is further emphasized by this point.

MR. W. C. FORD:

Under the methods of the Boston check clearing house a bank as close to New York as Stamford, or even closer, perhaps, is expected to clear through Boston. Does not that naturally come into the New York district?

MR. TALBERT:

Yes; during the investigation of the sub-committee of the clearing-house committee, on which sub-committee I had the honor of serving under Mr. James G. Cannon, among other things we looked carefully into the question as to what points should be free points. We came to the general conclusion that for the benefit of trade the New York banks could well afford to let in free any bank within twenty-four hours of New York or any bank from which returns could be received on the morning of the second day from the time we cash a check, provided always that they would remit New York funds without charge. So we should have made that recommendation but that a large number of the members of the New York clearing house were conservative men, well along in years, and opposed to radical changes. We could not get any other concession than to open up the New England territory and New Jersey, a good part of which is really suburban to New York. The Connecticut banks, having a greater need for New York than for Boston funds, wanted to come in, and bring to us forty millions of dollars that are now carried in Boston, Baltimore and Philadelphia. We gave them the option of coming in, but they have not come, because they cannot afford to. The small banks, in order to exist, must exact a reasonable toll to cover their own expenses in remitting. The Connecticut banks, however, made the proposal

that they would accept our terms on the condition that we would establish a bureau similar to that used in Boston, but we were not willing to do so. They offered to give us direct eight or nine cents a thousand, which they would have to pay through the clearing house anyway.

A MEMBER:

Now you are gradually moving to the point where every depositor in an American bank will be made to pay something for the privilege of keeping his account.

MR. TALBERT:

He certainly ought to. I picked up an example last winter. Ann Arbor has about five thousand students and probably almost half of them keep bank accounts. The banks charge all those students a moderate fee for keeping their accounts. The large banks in some cities estimate that it costs them a dollar a month to handle small accounts.

A MEMBER:

I do not understand Mr. Talbert's point concerning the value of the clearing system to commerce. You state that the Boston system is the most perfect yet developed, and that it has reduced the cost of collection to probably seven cents a thousand dollars. Nevertheless only 10% of the bank clearings go through by that method. Manifestly some other clearing method is more beneficial either to the banks or to the community.

MR. TALBERT:

It is more beneficial to the interior bank. The meat of the whole cocoanut is this—the actual final transportation of a certain amount of money is necessary for the maintenance of reserves. Also, there is a certain amount of expense in the way of clerk hire, postage, stationery, rent, salaries, and other unavoidable charges for conducting a business. The country banker is exposed to those charges quite as much as we are in the great places, and perhaps the charges are greater in proportion to the volume of his business. It is therefore necessary

for him to impose this small exchange charge. It is not very much on each transaction, but in the aggregate it amounts to an enormous sum. He is bound to impose that or suffer a loss. What advantage is it to his bank, he argues, that every customer of all the other banks of his town can have their checks circulated either in Boston or in New York? If they want to make a payment there, let them pay him ten or fifteen cents for a draft. Being deprived of that legitimate charge he takes it off the check, and commerce pays the charge, no matter how it comes in.

Mr. J. H. Mitchell:

I should like, if I am not out of order, to refer to Section 15 of the bill, which provides for open-market transactions. I have been informed that the object of that is to protect the gold reserve of the regional reserve banks; for that reason I think it is proper perhaps to bring the matter up at this time. The wording of this section gives the regional reserve bank the right to go into the open market and purchase bankers' bills, also to deal direct with farmers, corporations and individuals, and to purchase such bills as are eligible for rediscount. I should like to ask if, by this section, the reserve banks have the right to purchase commercial paper in the open market in competition with the member banks?

Mr. Gardin:

No; that relates solely to foreign transactions. I think it goes a little bit too far in permitting the federal reserve banks to go into the open market, because I do not think they can do it successfully. But such privilege is an absolute necessity in order to protect the gold supply. The member banks probably need it for their own purposes, as they would refuse to hand their paper over to the federal reserve bank unless at exorbitant rates. Therefore the federal reserve bank must have the right to make a bid itself. I think it is a wise provision, though from a selfish standpoint I should rather not see it in the bill. It will prevent any extortion on the part of the member banks in selling exchange to the federal reserve bank when it needs to am-

plify a foreign portfolio. Does that quite answer the question?

MR. MITCHELL:

Not exactly. It certainly does not confine the transaction to foreign bills.

MR. GARDIN:

I think a previous section, however, provides that a reserve bank can give out paper only for its member banks; therefore it stands to reason that it cannot go out into the open market and buy domestic paper.

A MEMBER:

Mr. Mitchell, you have in mind, of course, what we term commercial paper in this country. Is that what you had in mind?

MR. MITCHELL:

Yes.

A MEMBER:

They could not purchase that. We have really no commercial paper in this country; we call notes on manufacturers' dealings commercial paper. The money borrowed may be used for commercial purposes, but I have known cases where it was used for building houses and doing other things of a permanent nature. They could not buy that kind of paper.

MR. MITCHELL:

That is what we hope it means, but does it?

A MEMBER:

Even if it did not, as Mr. Gardin points out, the federal reserve banks would not have the facilities for gaining credit information necessary to compete successfully with commercial banks in buying domestic paper; consequently they would prefer to buy paper that comes within the purview of the law. As Mr. Gardin says, it is absolutely essential that the reserve bank

for its own protection should be permitted to go out into the open market in competition with members and the private bankers. The regional banks could not control the gold movement merely by changing the discount rate; they would have to protect themselves by purchasing exchange in the open market.

MR. TALBERT:

The sense of that whole section, it seems to me, is that they can buy no paper of any kind, domestic or foreign, or at any rate, no domestic paper, without the endorsement of a member bank.

A MEMBER:

I had the same impression that Mr. Talbert has when I first read the section, but my attention was called to the fact that another construction was possible. I went to Mr. Glass, chairman of the banking and currency committee of the House, and asked the question: "Are the reserve banks under Section 15 permitted to buy commercial paper?" His reply was that that was the intention of the bill and that the purpose of the provision was to equalize and reduce rates. Section 15 is one of the most important sections af the bill and one that ought to be thoroughly understood. It should contain absolutely no ambiguity.

MR. STERN:

I desire to be enlightened about one important point of the bill. Acceptances, reserves and deposits are all interdependent, are they not? We have a section in the bill defining what reserve shall be held against deposits. Are the banks to hold reserves against acceptances, which are contingent liabilities?

PROFESSOR O. M. W. SPRAGUE, Harvard University:

The bill provides that the reserve shall be on outstanding demand liabilities. An acceptance is not a demand liability, but it matures in the future. No reserve is required against time liabilities.

MR. GARDIN:

An acceptance is an obligation of the bank's customer, and that is a protection. If the acceptance were made by the bank in order to borrow money, then it would be a different thing. Then, properly speaking, a reserve ought to be called for. But as it is a liability of the customer, his financial condition is closely inquired into before a bank gives its acceptance. Hence the possibility of any loss consequent upon this acceptance liability is so remote that it would be absurd to call for a reserve against it.

A MEMBER:

Must not the banks keep a reserve against deposits on certificates, though they are time liabilities?

PROFESSOR SPRAGUE:

The bill refers to the institutions to be established; they have no right to take time deposits. In speaking of the reserve of national banks it is necessary to use the term "deposits," but when speaking of the federal reserve banks the law very properly uses the expression "demand liabilities," since the federal reserve bank may not receive time deposits.

MR. F. B. WHITNEY, Waukegan, Ill.:

The United States has a favorable balance of trade exceeding a half billion dollars. Cotton and petroleum products, provisions and breadstuffs, copper and tobacco furnish half of our exports.

Foreign countries must buy these products from the United States; in fact, about three-fourths of our exports sell themselves and tend to control their own terms of sale and delivery; generally f. o. b. port export and cash against documents or rarely to exceed ninety days' payment. However, the marketing of the immense crops of cotton, wheat, corn and other staples often produces great anxiety in financial and business circles and sometimes causes such a tight money market that the government comes to the aid of the embarrassed bankers in the crop districts.

If the United States had one or more powerful foreign trade banks, they could aid materially in financing the movement of the crops from the field to the foreign buyer.

It is in the export of finished manufactures, however, that we most need the services of American branch banks abroad. England and now to an important extent Germany has rich trading concerns and banks with branches in every part of the world. In London alone there are nearly one hundred foreign and colonial banks. Hence England and Germany are masters of foreign credits, and herein lies one secret of their success in exporting finished manufactures in competition with the United States.

Europe will sell manufactures in foreign lands, c. i. f. import port, draft to be accepted upon arrival of the shipment in port, shipping documents to be delivered upon acceptance of draft and payment, to be made as necessary in either 60, 90, 120, 180, or 270 days after acceptance, depending upon the character of the goods and the import country. German banks through accounts current give personal credit to exporters who are allowed certain amounts of overdrafts from which they may pay cash to the German manufacturers. Both England and Germany with their innumerable foreign merchants and banks to give quick reliable information as to the daily standing of foreign buyers extend large open credits throughout the world. Probably the average credit based upon documents does not exceed ninety days, but whenever necessary credits are extended even to a year. The banks discount this long-time paper.

Probably drafts not exceeding ninety days will sell and finance the greater proportion of the United States' exports of finished manufactures; but we lose annually sales that aggregate immense sums because the United States has not seen fit to grant the longer credits given in Europe. This conservatism is at present inevitable; for the average United States export manufacturer has no available means to secure quickly proper trade information regarding the standing of prospective buyers. No great expansion of our exports of manufactures can be hoped for as long as we depend upon English and German banks to finance the marketing of them.

The federal reserve bill furnishes the discount facilities needed to extend foreign trade, but the benefits may be more apparent than real because New York will naturally try to continue her monopoly of the foreign exchange business. It might be prudent to insert in the act provisions that will permit any great section of the country to marshal its banking forces to protect its special interests abroad. The South might well be benefited by having a great "cotton" bank in England, and thereby cut out middleman commissions and eliminate certain abuses that injure the planter.

There are many ways to establish a great foreign trade bank or banks. Economically the ideal would be a system in which the federal reserve banks jointly owned a great foreign trade bank with branches throughout the world. Let the national local banks negotiate the exchange business in each district and then turn it over to the jointly owned reserve bank, which in turn could refer the business to the jointly owned foreign trade bank. This bank could face London with the accumulated power of the United States behind it. The federal reserve board can establish liberal regulations and modify them as experience dictates. Let the bank and the traveling man enter into foreign markets side by side; the result will gratify the American workman and manufacturer.

PROCEEDINGS OF THE SECOND CONFERENCE ON CURRENCY REFORM HELD IN NEW YORK, OCTOBER 14 AND 15, 1913

In view of the probability that important legislation on currency and banking would be enacted by Congress during the latter part of the year 1913, it was decided by the executive committee of the Academy of Political Science in the spring of that year to devote its fall meeting to the subject of currency and banking legislation. The wide interest awakened by the conference held in 1910 led to the belief that a second meeting of the same general character would have a considerable educational value.

General Committee

The following gentlemen consented to serve as a general committee for the organization of the conference:

John H. Finley, *Chairman*
Frank B. Anderson, San Francisco, Calif.
A. Piatt Andrew, jr., Boston, Mass.
Nicholas Murray Butler, New York city
John Claflin, New York city
Henry P. Davison, New York city
Davis R. Dewey, Boston, Mass.
Cleveland H. Dodge, New York city
Fred. W. Fleming, Kansas City, Mo.
A. Barton Hepburn, New York city
Henry L. Higginson, Boston, Mass.
Edmund J. James, Urbana, Ill.
Jeremiah W. Jenks, New York city
Samuel McCune Lindsay, New York city
Robert J. Lowry, Atlanta, Ga.
Henry Morgenthau, New York city
John Perrin, Pasadena, Calif.

Lawrence C. Phipps, Denver, Colo.
Carl C. Plehn, Berkeley, Calif.
Julius Rosenwald, Chicago, Ill.
Charles F. Scott, Iola, Kansas
Henry R. Seager, New York city
E. R. A. Seligman, New York city
William F. Slocum, Colorado Springs, Colo.
Robert W. Speer, Denver, Colo.
James Speyer, New York city
Benjamin Strong, jr., New York city
Frank Strong, Lawrence, Kansas
E. F. Swinney, Kansas City, Mo.
Frank W. Taussig, Cambridge, Mass.
Frank Trumbull, New York city
Theodore N. Vail, New York city
Frank A. Vanderlip, New York city
Henry Walters, New York city
Paul M. Warburg, New York city
Harry A. Wheeler, Chicago, Ill.
H. Parker Willis, New York city

Executive Committee

The services of Professor E. W. Kemmerer of Princeton University were secured as secretary, and the arrangements for the meeting and the drawing up of the program were in the hands of the following executive and program committee:

Henry P. Davison
A. Barton Hepburn
Joseph French Johnson
Alexander D. Noyes
George A. Plimpton
Henry R. Seager
E. R. A. Seligman
Theodore N. Vail
Paul M. Warburg
H. Parker Willis

Samuel McCune Lindsay, *Chairman ex-officio*
E. W. Kemmerer, *Secretary*
Edward J. Bullwinkel
David M. Heyman
Thomas H. Watson, jr.
Assistant Secretaries

STATE DELEGATES APPOINTED BY GOVERNORS

The following delegates were appointed by the governors of the states named:

Delaware.—John S. Rossell, L. Scott Townsend, Sylvester D. Townsend, Caleb M. Sheward, Otho Nowland and Ezekiel Cooper, Wilmington.

Iowa.—Robert J. Fleming, Des Moines; R. O. Green, Fort Dodge; J. L. Waite, Burlington; Geo. W. French, Davenport; Ben Bear, Decorah; Geo. E. McLean, Dubuque; B. P. Holst, Boone; L. A. Hamill, Keokuk; Lee Nagle, Red Oak; Harry J. Green, Decorah; Thomas D. Foster, Ottumwa; J. H. Darrah, Chariton.

Maryland.—J. H. Hollander, Robert Garrett, B. H. Griswold, Waldo Newcomer, H. F. Baker and W. H. Maltbie, Baltimore.

Michigan.—E. H. Doyle and B. F. Davis, Lansing; George B. Morley, Saginaw; George E. Lawson, Detroit; George H. Young, Bay City; F. H. Williams, Allegan.

Minnesota.—N. F. Banfield, Austin; F. A. Chamberlain, Hovey C. Clark, E. W. Decker, C. M. Harrington, F. E. Kenaston, F. M. Prince, E. P. Wells and F. G. Winston, Minneapolis; Geo. A. DuToit, Chaska; E. H. Bailey, John H. Mitchell, Geo. H. Prince and J. W. Wheeler, St. Paul; A. D. Stevens, Crookston.

Mississippi.—J. F. Flournoy, jr., Canton; F. W. Foote, Hattiesburg; Oscar Newton, Jackson; Walter Broach, Meridian; W. Thomas Rose, Vicksburg.

Nebraska.—P. L. Hall, Lincoln; J. H. Millard, Omaha; J. W. Wilson, Stromsburg; C. F. Gund, Blue Hill; Geo. Kingsley,

Minden; Patrick Walsh, McCook; A. L. Clarke, Hastings; J. T. Trenery, Pawnee City.

New Jersey.—Robert D. Foote and A. G. Evans, Morristown; William C. Heppenheimer, Hoboken; E. I. Edwards, Jersey City; Uzal McCarter, Newark; B. H. Minch, Bridgeton; Frank A. Fetter, Princeton.

New Mexico.—E. A. Cahoon, Roswell; M. W. Flournoy, Albuquerque; H. J. Jones, Tucumcari; John W. Harris, Las Vegas.

New York.—Ledyard Cogswell and John A. Becker, Albany; James G. Cannon, Willard V. King, J. W. Jenks, Willard D. Straight and Thomas W. Lamont, New York city; Ansley Wilcox, Buffalo; Merwin K. Hart, Utica; Pliny T. Sexton, Palmyra; Norman Mack, Buffalo; Simon Hessburg, Albany; Walter F. Willcox, Ithaca.

Pennsylvania.—Henry Tatnall, Joseph Moore, jr., Levi L. Rue, Edward M. Malpass, Richard L. Austin, Alba B. Johnson and Edward Sherwood Meade, Philadelphia.

Rhode Island.—George H. Newhall and Marsden J. Perry, Providence.

South Carolina.—Louis Appelt, Manning; D. S. Henderson, Aiken; Fred. D. Dominick, Newberry; Samuel J. Nicholls, Spartanburg; Claude N. Sapp, Lancaster; D. Gordon Baker, Florence; W. A. Stuckey, Bishopville; W. J. Talbert, Parksville; J. R. Vandiver, Anderson.

Tennessee.—Frank J. Harle, Cleveland; W. K. Armstrong, Rogersville; W. B. Greenlaw, Columbia; H. J. Bowers, Tracy City; T. J. Taylor, Martin; S. F. Thomas, Brownsville; F. M. Mayfield, Nashville.

Texas.—W. W. Collier and E. P. Wilmot, Austin; B. L. Gill, New York city; E. O. Dunlap, Waxahachie; E. O. Tennyson and J. B. Adoue, Dallas; J. S. Rice and H. M. Garwood, Houston; John Sealy, Galveston; R. L. Warren, Terrell; Sidney Webb, Bellevue; K. M. Van Zandt, J. S. Spencer, Noah Harding, Ben O. Smith, W. H. Eddleman, John Sparks, T. B. Yarbrough, E. E. Baldridge and W. B. Newby, Fort Worth.

West Virginia.—B. W. Peterson, N. B. Scott, W. B. Irvine and H. C. Ogden, Wheeling; A. B. Fleming and L. M. Davis, Fairmont; V. L. Highland, Clarksburg; A. B. White, Parkersburg; John L. Dickinson and F. M. Staunton, Charleston; C. W. Dillon, Fayetteville; J. L. Caldwell and Taylor Vinson, Huntington; Isaac T. Mann, Bramwell; S. D. Camden, Parkersburg; William E. Arnett and Blaine E. Elkins, Morgantown; W. L. Smith, jr., Chester; Wells Goodykoontz, Williamson; V. Skye Straley, Princeton; Felix Elliott, Kingwood.

Mr. John T. Manson attended as the official delegate of the New Haven Chamber of Commerce.

In addition to delegates and members of the Academy, many prominent bankers and students of financial affairs attended the meetings of the conference.

Five sessions were held. By the courtesy of the New York Chamber of Commerce its hall was placed at the disposal of the Academy for its meetings on October 14th, and between the sessions a luncheon was served to those in attendance.

Hon. Robert L. Owen of Oklahoma, Chairman of the United States Senate Committee on Banking and Currency, and Hon. Robert J. Bulkley of Ohio, member of the House of Representatives Committee on Banking and Currency, addressed the first session of the conference, explaining and defending the provisions of the proposed Owen-Glass bill. Hon. Carter Glass of Virginia, Chairman of the House of Representatives Committee on Banking and Currency, who had accepted the invitation of the Academy to be present, was detained by illness. His paper was read by title, and appears elsewhere in this volume (page 12). A large number of leading New York bankers listened to these addresses.

Two sessions were held at Earl Hall, Columbia University, on October 15, and in the evening a large dinner meeting, presided over by Dr. John H. Finley, President of the College of the City of New York, was held at the Hotel Astor. The members of the House and Senate Committees on Currency and Bank-

ing were guests of honor. Professor Karl Rathgen, Kaiser Wilhelm Professor for the year 1913; Professor Josef Schumpeter, Austrian Exchange Professor in Columbia University; and Sir Courtenay Ilbert, Clerk of the House of Commons, also were present as guests of honor. The address of the evening was delivered by ex-Senator Nelson W. Aldrich, Chairman of the National Monetary Commission.

Prof. Samuel McCune Lindsay, President of the Academy, presided at the first and fourth sessions; Prof. E. W. Kemmerer, of Princeton University, at the second session; and Prof. E. R. A. Seligman at the third session. The program follows:

FIRST SESSION

Tuesday, October 14, 1913

New York Chamber of Commerce, 65 Liberty Street

The Federal Reserve Act

Address of Welcome by John Claflin, President of the Chamber

Speakers

Hon. Robert L. Owen, Chairman of the United States Senate Committee on Banking and Currency

Hon. Carter Glass,[1] Chairman of the House of Representatives Committee on Banking and Currency

Hon. Robert J. Bulkley, member of House of Representatives Committee on Banking and Currency

General discussion

SECOND SESSION

Tuesday, October 14, at three o'clock

New York Chamber of Commerce, 65 Liberty Street

[1] Address read by title.

THE CENTRALIZATION OF BANKING AND MOBILIZATION OF RESERVES

1. Scope and Organization of the Proposed Regional Banks
   H. Parker Willis
   O. M. W. Sprague
   A. Barton Hepburn
2. The Mobilization of Reserves
   Arthur Reynolds

Discussion: Alexander D. Noyes
General Discussion

THIRD SESSION

Wednesday, October 15, at ten-thirty o'clock

Earl Hall, Columbia University

THE ELASTICITY OF CREDIT

1. The Rediscount Functions of the Proposed Regional Banks
   Frank A. Vanderlip
2. The Note Issue
   Joseph French Johnson
   E. W. Kemmerer

Discussion: Edward L. Howe,[1] Irving T. Bush and A. Piatt Andrew

FOURTH SESSION

Wednesday, October 15, at two-thirty, Earl Hall

FOREIGN AND DOMESTIC EXCHANGE FUNCTIONS OF THE REGIONAL BANKS

1. Domestic Exchange Problems
   W. M. VanDeusen
   Fred. I. Kent
   Joseph T. Talbert

[1] Address read at afternoon session.

2. Foreign Exchange Problems
   John E. Gardin
   J. A. Neilson

General discussion

FIFTH SESSION—BANQUET

Wednesday evening, October 15, at Hotel Astor

Banking Reform in the United States

Address by Honorable Nelson W. Aldrich

FOREWORD

"Truth for Authority, not Authority for Truth"

CHARLES HENRY DAVIS

President, National Highways Association

SOCIETY has, for centuries, manufactured more criminals than human nature of its own accord produces. The more fortunate, but not necessarily less criminal, have, almost universally, cruelly punished those less fortunate brothers caught in their so-called crimes. Correction, instruction, forgiveness, kindness have played but a small part in dealing with the "criminal" or "convict." Would that we might call him by a kindlier name! For many of us now think and talk of him as of a different breed, forgetting that he is, after all, a man. We cry out against slavery, yet legalize it for tens of thousands. We scorn revenge, yet mete out vengeance in the name of the law. We remove from society offenders against society and forcibly detain them, for years, in surroundings as much unlike real society as is possible. We then once more thrust them upon society untaught, revengeful, weak, broken in mind and body, and wonder why they fall again! Why should they not? Has not society done its utmost to prevent their rise? And yet society places the responsibility upon these poor unfortunate beings! Most of them are mentally deficient and should have our care and help —not our contempt. Many of them have been sorely tempted without ability to run from temptation. And all of us must run! Some have led honorable and useful lives and would continue to do so did society have the forbearance and forgiveness of the parent towards the child. And society should have such forgiveness and thus restore men to society and not brand them as criminals. Our modern prisons are barbaric. They typify the medieval prisons, so loathsome to our imagination, and yet we call them modern. They are

not. They still hold men in abject slavery, in idleness worse than death. Without sun. Sometimes without light. With foul air and fouler companions. Does this treatment, even of the convict, produce repentance? No, a thousand times no! Revenge, insanity, more crime are the inevitable results.

As in many other activities, our laws and their administration are fifty years behind the times. Once there, how many of us could resist the debauching influences? How many of us could resist the degrading example of those associates more steeped in crime and hardened by their previous contact with still earlier criminals? How many of us could return to the life outside without a feeling of bitterness, or resentment, against our whole social structure? We have abolished negro slavery, a paradise to that of criminal slavery. We maintain institutions little better than the torture chambers of ancient times. They are not designed for reform, tuition, enlightenment. They offer little incentive to right living, high ideals. They are not places where erring humanity may be schooled and trained to become good citizens. They are more fit to drag and trample down into the mire the poor unfortunates sent there for their "first offense." There, even plant life does not exist. The grass, the plants, the flowers, the trees do not grow within their yards. How much less does man! Could there be greater shame to our nation than thus to cling to the ancient custom of depriving men of their freedom, shutting them up within four walls, leaving them to their fate? "Men are but children of a larger growth." But do we treat our children in this wise? Do we not believe in pointing out to them and making attractive and possible the road to virtue? Do we rather enslave and chastise them unmercifully for having failed to find it out themselves? We used to when parents held the lives of their children in their hands! The state now so holds the lives of its citizens. When shall we take such power away? In our criminal procedure we now have the spirit of punishment, cruelty, unkindness, physical force, slavery, confinement, isolation, darkness, silence and all the resultant evils thereof, resistance, revenge, sullenness, depravity, hopelessness, insanity.

We should turn on the light; we should give men the sunshine, the free air and fields of the country. We should have, and thus give, hope, faith, help. We should correct, not punish. We should be kind and square and our "pals" will respond most wonderfully. Children are not controlled by physical force. Deliberate, low-voiced, firm kindness and square doing gain their obedience. So it is with their larger brothers. What results to be attained by such a change—change in our moral acknowledgment of the wrongs we have done to the convict! We have been too long blind to this wrong thinking and doing. We have had too much pride, too little charity. We have admired too long the public prosecutor. We have delayed too long the coming of the public defender.

How can we do all this? We must do something with those who violate the rules. Yes! But that something should be to help them not to break the rules again. Temporary exile, into a temporary society as nearly as possible like the one they left, would seem the best solution. They would thus be learning to play the game according to the rules. Responsibility, during their temporary exile, would increase the desire to play so well, so fairly, that they could go back from whence they came. To do this we must get them "Back to the land." But how? One way is *via* good roads, although some prefer railroading! To have Good Roads Everywhere throughout these United States will mean more to this nation than any other development since our Declaration of Independence. During all ages it has been of primary importance to provide a people with means of intercommunication. People, like water, must move or stagnate. They must run and play like the brook itself or become sluggish and dull—to themselves as well as to others. Of the seven modes of intercommunication—water, roads, post, railroad, telegraph, telephone, and wireless—only one, roads, is free to all the people of the earth. Roads are the most universally used and are therefore the most beneficial to the greatest number of people. The importance of Good Roads Everywhere is paramount—their benefits are all-embracing.

There are 18,000,000 children who endeavor to attend school. There are over 30,000,000 who should attend school. Why don't they? Largely because during much of the school term a considerable part of the 2,000,000 miles of our roads is impassable. This is shown by the fact that only nine-tenths of one per cent (0.9%) of the urban white population of the United States of native parentage is illiterate, while rural illiteracy is six hundred per cent greater in the same class of inhabitants. How can we have or get good schools in the rural districts if we have not the good roads to reach them at all times and in all seasons? If we do not have good schools, and illiteracy results, then we help—in the best possible way—the growth of the criminal classes.

The relation of good and bad roads to illiteracy, and thus to crime, is indicated by the following table:

	Native White of Native Parentage / Total Population (1910)	Per cent Improved Roads (1909)	Per cent of Illiterate Native Whites of Native Parentage (1910)		
			Total	Urban	Rural
New England: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut	2,135,801 / 6,552,681	22.2	0.7	0.5	1.2
South Atlantic: Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida	5,397,864 / 12,194,895	6.7	8.0	2.2	9.8
Pacific: Washington, Oregon, California	1,684,658 / 4,192,304	14.2	0.4	0.3	0.6
West South Central: Arkansas, Louisiana, Oklahoma, Texas	4,101,510 / 8,784,534	2.6	5.6	1.4	6.8

This table does not of course include foreign-born, native-born of foreign parentage, or negroes, all of whom are ex-

cluded for obvious reasons. Illiteracy is eleven times greater in the South Atlantic States than in New England, while the percentage of improved roads (such as they are) is less than one-third. Similar figures for the Pacific and West South Central are: fourteen times greater illiteracy, while the percentage of improved roads is less than one-fifth as much. The excess of illiteracy in rural over urban New England is only one hundred and forty per cent, while in the South Atlantic States this excess is nearly four hundred per cent, due to the lower percentage of improved roads. This difference is slightly greater in comparing the other two groups in the table.

The children of today are the electors, the representatives, the senators, the judges, one of them the President, of to-morrow. The population is increasing by leaps and bounds. If education means liberty, and if poor roads mean illiteracy or worse, have we a right *not* to build good roads, even if they would not pay for themselves well within the generation which builds them?

To-day we have preventive medicine. Instead of waiting to cure people of disease we are bending every effort to prevent disease. Why not profit thereby? Crime is a crime? Idleness more than any other one thing produces moral deterioration and crime. The building of "Good Roads Everywhere" by the nation, the state, the county and the town will give constant employment to the army of unemployed. This will tend to prevent crime if we apply it rightly.

What better thing than to employ those temporarily withdrawn from our society, in the building of "Good Roads Everywhere?" Such a policy will be of vast economic advantage to the nation. It will give brawn, brain and heart to those most needing it. It will give them freedom of mind and body. It will give them inspiration, hope. Tear down our prison walls, and rear no more, for they are festering places for our fellow beings. Let us no longer go back on those of our own mold! Let us rather, from now on, give our "pals" a "square deal!" We can be sure they will answer in kind!

USE OF CONVICT LABOR FOR HIGHWAY CONSTRUCTION IN THE NORTH [1]

SYDNEY WILMOT, B. S. IN C. E., A. M.

THE engineer is, or should be, a many-sided man; yet his relation to the problem of convict labor is not apparent to the casual observer. His interest in the matter is not of his own choosing. Ever since the working of state convicts on public roads has been advocated, opponents have questioned its feasibility in actual operation. Assurance is demanded of the success of the scheme in every particular case, before its trial will be sanctioned. Can the convicts do the work required under the peculiar conditions in each case? How can they do it? And especially, will it pay? Answers to these problems are demanded of the highway engineer.

CONVICT LABOR AND GOOD ROADS

It is unnecessary to go deeply into the need of a change in the present system of dealing with convicts; penologists and prison reformers have proved this necessity beyond a peradventure. Convicts are the property of the state to be used as the state in its own wisdom and sovereign authority sees fit. This is sanctioned by the constitution—legalized slavery. Early it was seen that idleness is detrimental. Even to-day in many prisons "solitary confinement" is the severest disciplinary measure in use. Prisoners have often been known to develop insanity under its influence.[2] "Satan finds some mischief still for idle hands to do"—in this case, it is brooding, the aggravation of the desire for revenge, rather than the consciousness of guilt.

[1] An essay submitted in partial fulfilment of the requirements for the Degree of Master of Arts in the Department of Highway Engineering under the Faculty of Pure Science of Columbia University in the City of New York.

[2] In the Ohio penitentiary during inactivity, eight men were transferred to the prison asylum in one month, the previous average under contract labor being about one per month.—*New York Evening Sun*, February 7, 1911.

History shows that through the evolution of our social institutions the convicted man has been treated in two ways, both economic. When economically valueless he has been killed; when economically valuable he has been enslaved. In this country when the industrial revolution created a demand for laborers, the children were seized and thrown into the mills; a similar fate befel the prisoner. In the South the convict was turned over bodily to a lessee who clothed and fed him and worked him as he willed. In the North, to meet the demands of the public that big institutions be built, and to supply the needs of the prisoners, the lessee was admitted into the prison.[1]

This system has rapidly degenerated until to-day its former advantages are completely buried beneath the abuses to which it is subject. Our prison shops have become the channel through which the earnings of the prisoner have been diverted from his family and the state to furnish public graft and private profit. Methods of supervision patterned after those of the old Roman galley are in vogue. The system produces broken-spirited, distrustful, revengeful, and physically weakened men, who, by their condition and disposition are often incapable of earning an honest living, and who, by their appearance and manner, are unlikely to get the chance. The resultant increase in our prison population and the multitude of offenders who repeat their offenses are incontrovertible proofs of the inadequacy and absolute failure of our methods of treatment.

Moreover, not only does the state suffer, but free outside labor is brought into unfair and disadvantageous competition, since the prices paid for prison labor are very low. Organized labor has not been slow in appreciating these facts or backward in pressing its claim for the prevention of such competition. Nor is this all; the prisoner's family, dependent upon him for support, is deprived of the barest necessaries of life. The shortcomings of the system have been two-fold: the convict, the person most seriously affected, has been least considered; and the innocent have been made to suffer instead of

[1] *Prison Labor*, by E. Stagg Whitin. An address delivered before the Woman's Department of the National Civic Federation at Washington, January, 1914.

the guilty. The case against the whole system is succinctly stated in a recent report:

> Briefly summarized, the objection, then, to contract labor is that it is not only a form of slavery, but an unjustifiable form of slavery, because it is a delegated form in which the responsibility and authority are divorced. It is the exploitation of the helpless convict, not for the profit of the state, but for the profit of a private corporation. It is the wrongful surrender and abandonment of the control and jurisdiction over the person of a prisoner either to a greater or less degree. It furnishes opportunity for convicts to communicate with the outside world in violation of the rules of the institution and to receive opium, morphine, cocaine and other forms of "dope," if the employes of the contractor are subject to improper influence or even unduly sympathetic. It furnishes opportunity for corruption between the contractors and prison officials and officers of the law, and subjects prison officials to criticism regardless of whether there is any foundation in fact for the charges. It tends to destroy discipline, it impairs reformation and destroys hope on the part of the prisoner; it is injurious to the manufacturer employing free labor; it is unfair competition to free labor because it tends to destroy the living wage and lessens the opportunity for labor, and on the whole is uneconomically unsound.[1]

The contract-labor system, as such, is on the decline. Many states have seen its iniquities and have legislated it out of existence. The present problem is to find a suitable substitute. The work done must fulfil the following conditions:

(1) It must not compete with outside free labor.

(2) It must be of benefit to the convict himself.

(3) It must be a benefit to the state.

(4) It must provide the means to rehabilitate the convict in society after his release, or at least partially to sustain his family and dependents during his imprisonment.

Turning to the other side of our problem, there is no need to advocate good roads. Their usefulness is universally recognized and their need generally acknowledged. Lord Montague of Beaulieu says, "Road traveling is of far more importance than all other forms of locomotion combined."[2] Our

[1] *Report of the Committee Appointed to Investigate the Management of the Iowa Penitentiary at Fort Madison,* 1912.

[2] International Road Congress, Paris, October, 1908.

country has fostered its industries by a protective tariff; has developed its railway communication by land grants; has expended millions on its harbors, canals and inland waterways; is issuing bonds for reclamation and conservation to increase the productivity of its land; while its highways, the basic means of communication between industrial communities and the farm, have been left for local development. Our roads, in comparison with our needs and resources for improvement, are the worst to be found in any modern civilized country.

The advent of the motor vehicle brought the demand for more roads and the necessity for better roads to suit changed conditions. This fact has long since been self-evident, but the satisfactory financial solution of the road problem remains to be worked out in actual practise. Many conservative engineers and economists doubt the propriety of saddling unborn generations with our road bonds. Whether or not it is right to incur road obligations which do not become due until the roads they represent have long since worn out, it will always be economically desirable to secure roads as cheaply as is possible consistently with serviceability, and to pay for them as soon as possible after they are built or at least within the life of the improvement.

The road situation was well explained by ex-Congressman William Sulzer in his speech before the House of Representatives on July 12th, 1912:

> The plain people of the land are familiar with the truths of history. They realize that often the difference between good roads and bad roads is the difference between profit and loss. Good roads have a money value far beyond our ordinary conception. Bad roads constitute our greatest drawback to internal development and material progress. Good roads mean prosperous farmers; bad roads mean abandoned farms, sparsely settled country districts and congested cities where the poor are destined to become poorer.
>
> Good roads mean more cultivated farms and cheaper food products for the toiler in the cities; bad roads mean poor transportation, lack of communication, high prices for the necessities of life, the loss of untold millions in wealth, and idle workmen seeking employment. Good roads will help those who cultivate the soil, and feed the multitudes; and whatever aids the producers and farmers of our country, will increase our wealth and our greatness, and benefit all the people.

We cannot destroy our farms without final decay. They are today the heart of our national life, and the chief source of our national greatness. Tear down every edifice in our cities and labor will rebuild them, but abandon our farms and our cities will disappear forever.

One of the crying needs of this country, especially the South and West, is good roads. The establishment of good roads would, in a measure, solve the question of the high price of food and increasing cost of living. By reducing the cost of transportation it would enable the farmer to market his products at a lower price and at a larger profit at the same time. It would bring communities closer together and in touch with the centers of population, thereby facilitating the commerce of ideas as well as of material products.

When the agricultural production alone in the United States for the past eleven years totals $80,000,000,000, a sum that staggers the imagination, and when we consider that it cost more to take this product from the farm to the railway station than from such station to the American and European markets, and when the saving in cost of moving this product of agriculture over good highways instead of bad would have built a million miles of good roads, the incalculable waste of bad roads in this country is shown to be of such enormous proportions as to demand immediate reformation and the exercise of the wisest and best statesmanship.

But great as is the loss to transportation, material, industrial and farming interests, incomparably greater is the material loss to the women and children and the social life, a matter as important as civilization itself. The truth of the declaration of Charles Sumner, fifty years ago, that "the two greatest forces for the advancement of civilization are the schoolmaster and good roads," is emphasized by the experience of the intervening years and points to the wisdom of a union of educational, commercial, transportation and industrial interests of our country in aggressive action for good roads.

Even the most ardent advocates of convict labor on public roads do not think it a solution for all the problems of prison labor and good roads. They do maintain that it has thus far been uniformly successful when tried under fair conditions. This contention they substantiate by citing the experience of several states. In order to make possible a comparative study upon a fair basis, the northern states have been selected for treatment in this discussion.[1]

[1] The remaining states, whose problems differ from those of the northern states, are being treated in a supplemental thesis now in preparation under the Department of Highway Engineering of Columbia University and the National Committee on Prison Labor.

DEVELOPMENT OF CONVICT ROAD WORK IN NORTHERN STATES

It has been said that no treatment of the road question is complete without some allusion to the old Roman highways. These ancient thoroughfares are today the wonder of modern engineers; and they were built by slaves, of whom a large number were "*servi poenae*," (slaves of punishment), *i. e.*, convicts.[1] It might almost be said that we are only beginning to rediscover the best use for our prisoners, which Justinian knew fourteen hundred years ago.

From the "*servi poenae*" of the Romans and the serfs of the middle ages down to the convicts of today, society has always had a class in involuntary servitude, and has been face to face with the problem of finding something for the prisoners to do. Lacking the mine and galley, banishment or hanging often solved the question. In later times, the government assumed all responsibility for the criminal class by building prisons and keeping law-breakers therein. America, in need of colonists, relieved the overcrowded English prisons until African labor became cheaper and more adaptable for our needs. Later, Australia formed an outlet for the rapidly increasing criminal class in England. In this country, as in the mother country, conditions became deplorable so that the state sold the labor of its convicts to greedy and unscrupulous private individuals, hoping thereby to build and improve its own institutions.[2]

It is from this form of slavery that we are only today turning. The convict has had little chance, nothing to look forward to, except despair. Now we are giving him an opportunity to make good and a reward for well doing. Lincoln well expressed the difference when he said, "Free labor has the inspiration of hope; pure slavery has no hope." By the "honor system," our criminal "slaves" are allowed comparative freedom and every inducement is offered them to work out their own salvation. Inasmuch as this feature is an essential one and not restricted in its present use to any one

[1] *New American Encyclopedia,* 1863, vol. XIV, p. 700.

[2] *Penal Servitude,* by E. Stagg Whitin.

locality or form of convict labor, although most highly developed in the West, it may well first be explained in full.

The unique characteristic of the honor system is the absence of armed guards. At the beginning a makeshift, a matter of economy, it has since become an essential. The expense of guarding convicts is heavy and offsets all the other savings of the system of production by convict labor. Moreover, the presence of arms has a depressing mental and moral effect on prisoners, lowering their spirits and working against efficiency, increasing their suspicion and their desire for shirking and escape. The honor system, when successful, is advantageous in two ways. It lessens cost, because the guarding expense is decreased and the output of the men increased; it develops manhood, because the men are happier and more responsive, a state making true reform possible. A certain measure of faith in the prisoners has always been shown toward "trusties," but the present features of the honor system far outdo anything of a similar character tried heretofore. Success depends upon two factors, *viz.*, the personality and attitude of the superior, the warden of the penitentiary, with his subordinates, and the discreet choice of the prisoners for the work. The warden should be a student of human nature, open in manner and fair in dealing, capable of showing and begetting trust, and, moreover, should exemplify "the square deal" in all things.

The prisoners are chosen after close and extended individual study, the governing factor being temperament and capacity for responsibility rather than nature of the crime and length of sentence. It is not claimed that all prisoners receive benefit from the honor system. The aim is, in every case, to do the man good. To this end, his degree of liberty is dependent on his estimated fortitude against the temptation to break his word. Road work should be the type of labor granted to the highest class of convict and should be the reward of good conduct and honest endeavor in less desirable employment. It should be attended with special privileges, such as commutation of sentence and bonus in wage, which will tend toward efficiency and good deportment.

The procedure is usually as follows: The honor system

being known and the prisoner having expressed his willingness to try it (acceptance should be voluntary), the warden gives him a heart-to-heart talk on manhood, expresses his faith in him, and tells him he is about to get a chance to make good. The man promises that he will faithfully comply with all the rules of the camp, that he will not attempt to escape, and that he will do his utmost to prevent other prisoners from escaping. He is then committed to the road gang.[1] Such is the well deserved popularity of the honor system in road work among the convicts themselves that a prisoner's friends and relatives often voluntarily guarantee his good behavior, and promise if possible to prevent his escape.

In operation, the highway camp can hardly be distinguished from that of free laborers. There are no stripes; khaki or blue is the uniform. Nominally, there are guards, but their real function is superintendence. Eight or ten hours' work, as the law allows, and three square meals, is the daily routine. Apart from this, the prisoner's time is his own, usually until nine o'clock, when lights are extinguished. The camp may be of tents or temporary wooden structures, as need and length of stay determine, without fence or barrier, except possibly of barb wire, in self-defense. The night guard only, often a convict, as in Colorado,[2] is allowed a gun for protection, and sometimes not even that. In a camp of thirty to fifty men, the ordinary number, usually three guards, two for day and one for night, are sufficient, and hence the combined cost of superintendence and guarding is little higher than the supervision of free labor.

Other privileges beside that of freedom are often accorded. Almost always a commutation of sentence is made, varying from five to ten or even to thirty days for every month. This "good time," being cumulative, is deducted from the regular sentence, or from the minimum, in the case of an indeterminate one, so that under favorable conditions, six or eight months only for every year's sentence need be served. Of all favors,

[1] Governor Shafroth, of Colorado, in *Kansas City Star*, May 22, 1911.

[2] *San Antonio* (*Tex.*) *Daily Express*, November 25, 1911, letter from Governor Shafroth, of Colorado.

this is the most appreciated, as, under the honor system, the men feel their humiliation more keenly and prize their complete freedom more highly. A small amount of money each week, for tobacco or other luxuries, the opportunity to write home, distinctive features of attire as a mark of honor, music and outdoor sports after work,—these all add to the attractiveness of the road camp over other forms of imprisonment.

The position of road superintendent is no easy or enviable one. The coördination of the work of men of different habits, temperaments, ideals and stations of life, demands the utmost of tact, persistence, patience and care.[1] To these men, in direct charge, is largely due the moral and financial success of the experiment.

While the saving in money has been considerable, as noted later, this is not the most important saving; the honor system saves men. It is hard to realize that life-prisoners are left hundreds of miles from the prisons without guards, but such is the case. The most hardened criminals, dangerous men, and often the worst behaved under surveillance, are said to be the very best workers and to cause the least trouble on the road.[2] A criminal often is a good man gone wrong, a victim of misfortune, a person of great capabilities misdirected. The "square deal," here shown, simply attempts to change his goal in life, to redirect his misapplied energies, and to restore his faith in mankind. A large measure of the success achieved is due to a convict's temperament, a responsiveness to kind and fair treatment, such as any free person would show, but in his case more appreciated because of its unusualness; and most of all, it is a result of a peculiar sense of honor, exemplified by the rule of the underworld, "To be square with a pal is the only law I know." Warden Tynan of Colorado says, "You can trust them better than outside men, because of a peculiar honor. They are loyal because honest, not through fear, if they are treated honestly." One of the camp rules, "I am my brother's keeper," is taken literally by putting two

[1] *Good Roads,* June 26, 1913, p. 722.

[2] Biennial report of Warden Tynan of Colorado Penientiary for period ending November 30, 1910.

men in a room together, each partially responsible for the other.[1]

One or two typical examples show the results. In Colorado, under the honor system, for the biennial period ending November 30, 1910, the percentage of successful escapes was reduced to twenty-four per cent from sixty-four per cent.[2] This showing must be credited largely to the alertness of the convicts in keeping their fellow-prisoners from escaping. In Oregon, after the recapture of an escaped inmate at Governor West's personal expense, the other prisoners requested that they be allowed to pay all costs out of their own bonus money, alleging that the offender had "double-crossed" them by casting suspicion on the system and the individual prisoners. From Colorado comes the account of an escaped prisoner voluntarily offering to come back to complete his sentence. The prison officials doubted the sincerity of this proposal; but ten minutes before time for the gates to be closed, the man put in his appearance. He admitted that it was not the escaping that worried him, but the consciousness of having broken his solemn oath. He paid his own railroad fare back to the prison.[3]

Not all states favor this method. Press reports[4] state that in Utah it was given a trial and that with insufficient guards several escapes occurred. Thereupon this so-called "honor system" was voted unsuccessful. This is only what might have been expected. If it is necessary to have armed guards, have enough of them; if not, do away with them altogether.

Records show no concerted efforts on the part of convicts to escape from camps where the honor system is real. Further than that, there is positive evidence of a great reduction in the number of attempts over the number under the old system. In Colorado, during four years, with over eighteen hundred convicts, there was less than one per cent who broke faith,[5]

[1] *Better Roads*, October, 1912, article by Charles R. McLain.

[2] Colorado State Prison report for biennial period ending June 30, 1910.

[3] *Kansas City Star*, May 22, 1911.

[4] *Salt Lake City News*, December 21, 1912.

[5] *Annals of the American Academy of Political and Social Science*, March 1913, p. 59.

and the number is decreasing. In Arizona, during eight months, of one hundred and eighty convicts, American and Mexican, there were five escapes, six other attempts, and no deaths; while during the previous six months, under the former system, there were two escapes, two other attempts, and seven deaths. Thus it is seen that the placing of convicts on honor has not resulted in wholesale escapes, as was predicted. In Oregon, during 1911, there were on an average about one hundred men employed in crushing stone, and of these only one attempted to escape; he was quickly recaptured.[1] In Nevada, the honor system has been used for the last two years, and, according to the state prison report, of eight attempted escapes, five proved unsuccessful; no data as to the total number of men are given.[2] In New Mexico, the experiment of dispensing with armed guards has proved successful.[3] Of five hundred convicts on honor in Oregon during fourteen months, only three succeeded in making their escape; in all, fifteen tried to gain their freedom, but of this number, nine returned of their own accord, and three were recaptured.[4]

Even in the East, efforts to place convicts on their honor have met with success. For several years, Sheriff Frank H. Tracy of Washington County (Montpelier), Vt., has allowed his prisoners to work outside the jail, the convicts returning each night. They pay the state one dollar a day for their keep, the rest of the money they earn (about seventy-five cents) being retained for their own use. During the first four years, with eight hundred prisoners, there were but two attempted escapes. Both from the standpoint of the reformation of the convict, and of financial gain to the state, the method met with favorable results.[5] New York's newest prison, at Great Meadow, is without walls. The utmost liberty and wide privileges are allowed. A few of the guards carry guns, but weapons are considered useless; for, in a year, the only

[1] *Good Roads Year Book,* 1912, pp. 293-4.

[2] *Biennial Report of State Prison,* 1911-12, p. 8.

[3] *Annual Report of State Prison Warden,* November 30, 1912.

[4] *Tulsa (Okla.) World,* May 6, 1912. [5] *Atlantic Monthly,* August, 1911.

two escapes were by men not ordinarily allowed outside the prison.[1] There were two hundred and sixty-two convicts at Great Meadow during 1911.

Form the above statements, which are representative of conditions wherever the honor system is in vogue, it is evident that this method of handling prisoners is a decided success, and the reason for its approval among keepers and convicts alike is apparent.

WASHINGTON

For the four years preceding the spring of 1911, convicts were used in road construction in Washington. Beginning in 1909, convicts were used to run state rock-crushing quarries, furnishing rock for state and county roads. Since 1911, the convicts have been used in five large rock-crushing quarries.

The highway work is of interest, as it was not under the honor system. Balls, chains and stripes were not used, but the men were housed within a prison stockade, watched by armed guards day and night. The authorities were careful to provide plenty of good food and clothing. Some of the stockades were large enough for eighty-four men, and were made collapsible for easy removal. The usual number of men in a camp was fifty or a hundred—" first-termers " as a rule. At first, to promote order and efficiency, the camp superintendents and highway officials had power to give commutation of time for good conduct, but, as this method was not successful, the men were sent with a definite assignment of one year, with ten days per month commutation. Men eligible for employment on the roads were those who had served their minimum sentence, if indeterminate, and second-termers not under the indeterminate act. In 1910, during the time that 392 male prisoners were sent out, 356 were pardoned from the camps, so that the population of the camps must have been fairly uniform. The state jute mill was closed in the summer of 1910 to give more men for the road work, about two hundred being so employed on the highways and in quarries.

The work was successful, especially in the case of heavy rock

[1] *New York Times,* Sunday, December 29, 1912.

work. Presumably, this was because a greater number of men could be worked close together, reducing the expense of guarding. The men were healthy and enjoyed the work, but the percentage of escapes was high. From May 1909 to September 1910, there was a total of 501 sent to the camps, and of these, thirty-five escaped; probably the average number working at one time was considerably less than 500; in October 1910 there were 241. This poor showing as regards escapes is attributed to the fact that chances were being taken with hardened criminals. It is claimed, however, that under the honor system especial success can be attained with such prisoners.

Upon the failure of the 1911 legislature to appropriate funds for the continuance of road work, it was stopped about April of that year. At that time, there were about two hundred men on the roads and one hundred in the quarries. Since then, many convicts have been employed in the state quarries, furnishing crushed stone at nominal prices to private parties, mostly for road construction. Prisoners are still kept under armed guard and are housed in stockades.

As to efficiency, the men are credited with one-third more than free labor. This is due not to compulsion, but rather to fear of being taken back to the penitentiary. The authorities are said to favor resumption of road work, and it is hoped that the work may be continued.

OREGON

Commencing early in 1904 and continuing until 1908, state convicts were used on the roads of Marion County, Oregon, the county in which the state penitentiary is located. On this work, which was provided for by a special act of the legislature, only as many convicts were employed as one superintendent could conveniently handle. The work of the convicts was supplemented by that of residents of the vicinity. On the whole, the experiment was considered successful.

This work was recommenced in Marion County, under the honor system, in January 1911, the new governor (Oswald West) overcoming the lack of suitable legislation by taking

the prison situation into his own hands. Although a bill for convict labor on roads was defeated in the state legislature in February 1911, the agitation continued during the following spring and summer, and in September the governor offered state convicts for use on the road from Medford, Oregon, to the Crater Lake National Park. This work was the beginning of the construction of state highways by state prisoners. Honor road camp no. 1 was established and work commenced November 1, 1911. Since then, the work has been continued and developed along similar lines in other parts of the state.

The honor system is used in its most extreme form; there are no guards, chains or stripes; one man from the county is given jurisdiction over the camp, similar to that of the warden inside the prison; an engineer directs the work, but often one of the prisoners acts as foreman. The state provides the clothing which the men wear when they begin the work, but the county supplies further articles, such as shoes, from time to time, as they are needed. The county pays the railroad fare from the penitentiary, boards the men, furnishes all material, and, in addition, pays twenty-five cents a day as wages to each prisoner. During the first six months of honor work, of one hundred and fifty men, only three broke their word and attempted to escape. During a similar period, two years before, ten men, all under heavy guard, escaped from inside the prison walls, while shortly afterwards, in an attempt to work the men outside, eighteen got away; still later, six escaped at one time, of whom two were killed before all were recaptured. Comparison of these facts does much to indicate the efficiency of the honor system.

In 1911 the prisoners were employed almost entirely in quarrying and crushing stone, in preparation for the next year's work. During the past year, one of the principal pieces of work has been the state road from Hood River toward Portland, along the south side of the Columbia River. This road will give an outlet to all other branches from the back country, and will be of inestimable benefit to that part of the state. Such has been the success of the experiment that at the last election an initiative bill was passed provid-

ing for road work by state and county prisoners, thus vindicating the whole system, in spite of much previous adverse criticism.

CALIFORNIA

The laws of California do not permit state convicts to labor on roads, except within six miles of San Quentin prison. An average of about twenty-five men was employed in this way during 1912, under a foreman and two armed guards. This work is considered healthful and otherwise beneficial to the prisoners, and their labor compares favorably with that of free laborers.

For about the last fifteen years, the state has employed its convicts at rock-crushing in Folsom Prison, turning out in all about 70,000 tons of rock. According to the state comptroller's report (1910), the comparative cost of rock-crushing is high, due to inferior equipment and the low price obtained for the output. He contends that private companies in the vicinity are selling much larger quantities at higher rates. But Folsom Prison cannot sell its rock on the open market. The prison report for the same date (1910) gives the net profit for the year as ten cents per ton, against an average of only seven cents per ton for the whole fourteen years. Less than one hundred prisoners are employed in the rock-crushing. The industry is not considered important enough to warrant a new plant to replace the present one.

The question of state convicts for road construction came up during March 1911, in the shape of a bill authorizing such action. It was rejected by the legislature largely owing to the opposition of organized labor.

NEVADA

For the past two years, barring the month of May 1912, when a change took place in the state prison administration, Nevada convicts have been employed on state roads. They are prohibited from building bridges and culverts, in order to protect skilled outside labor. The prisoners are detailed to this work upon request of the county commissioners, the cost of maintenance being equally divided between state and

county. The state is allowed, out of the prison appropriation, fifty cents a day per man for keep while on the road, which sum, although only one-third the actual cost, is more than would be necessary to maintain prisoners in the penitentiary. In addition, the convicts receive a wage of twenty-five cents a day, and extra commutation of ten days a month.

Work has been almost wholly in Ormsby and Washoe Counties, and, during the latter half of 1912, about thirty prisoners were at work. An average of thirty-seven were employed in this way during 1911-12. These men, together with others on the farm, in all about forty per cent of the total prison population, which averaged one hundred and fifty-five, are on their honor. No authoritative statements as to the success of the work or probability of its continuance are available.

ARIZONA

During the year 1911, no convicts were used in road-building in Arizona, but commencing in June, they were employed at Tempe in constructing a 1500-foot reinforced concrete arch-bridge across the Salt River. In all, about three hundred and fifty men were at work, exclusive of free laborers, the foreman and a few carpenters. The prisoners were housed in a stockade under guard. They worked eight hours as a rule, and a credit of two days on the sentence was given for each day worked. The efficiency was estimated at about two-thirds that of free labor. This low efficiency was attributed to the fact that sixty-five per cent of the prisoners were inexperienced Mexicans. However, the prisoners were very healthy and were better contented than when in jail. During 1912 this bridge work was continued, and it has recently (in 1913) been completed.

In addition, there has been some state highway construction along other lines. Part of this work was on a road through the mountains to connect the great copper mines at Ray with the city of Globe. The rest of the work consisted of the construction of thirty-five miles of state highway to connect the town of Florence with the capital city, Phoenix.

The honor system is very similar to that of Oregon. While in prison, the convict stands on his record. Stripes are abolished, and otherwise the authorities treat the convict much like a free man. The convicts wear gray suits, are allowed an unlimited incoming and outgoing daily letter mail, and are given the privilege of the daily newspapers. Many of the foremost papers in the country are subscribed for by the state for the reading-room, and all the popular magazines are taken by the prison authorities for the use of all the prisoners. Musical and literary societies exist, also a mutual improvement league, formed and officered by inmates for the mutual benefit of all the prisoners. As prisoners prove themselves worthy of trust, greater freedom and more responsibilities are accorded them.

Finally, after successful trial, they are made honor men on road work, and are absolutely without guard. No firearms are allowed in the honor camps. One day's work, eight hours, counts for two days off the sentence. After work is done and on Sundays, a prisoner's time is his own. It has been found advisable to separate Mexican from American prisoners. In one instance, the foremen over both gangs were men serving life and twenty-year sentences. There are now two men acting as watchmen in the temporarily abandoned camp in a very isolated spot in the Pinal Mountains, who are both life-termers. As a rule, the only civilian in camp is the engineer who directs the construction.

While there have been some objections to the system, it now appears to be firmly established.

The saving to the taxpayers on labor in the construction of the thirty-five miles of completed highway between the towns of Florence and Higley, the three miles of the Globe-Ray highway which has been completed, the two miles of sewer at Florence and the bridge across the Salt River at Tempe, which is now under construction, is figured at $45,858. This represents 30,572 days' actual service rendered, figured at a minimum wage of $1.50 per day per man.

NEW MEXICO

New Mexico claims the distinction of being the first state to adopt the honor system, and successfully work prisoners on public highways by this means, the "honor system" in this instance taking the form of reduction of time for good behavior, in addition to the reduction ordinarily allowed. The working of prisoners on state roads was first authorized by an act of 1903, which provided that they be employed on a road between Santa Fe and Las Vegas. Road construction has been continued ever since that time. For the past three years, four camps of about thirty convicts each have been employed on roads, some free laborers recruited from the vicinity working with the convicts. In 1912, an average of seventy-four prisoners were employed on the roads, and of them, twenty-three were in Bernalillo County. The expectation is that the convict force can be increased to about one hundred in the near future.

The selection of prisoners for work in road camps is not confined to short-termers alone. The sentences of the prisoners in road camps range from one year to life. The superintendent has a personal talk with each prisoner selected for road work, and the prisoner must promise on his word of honor that he will obey the rules and make no attempt to escape. Only a small percentage prove unfaithful to their promise. In addition to the reduction of time for good conduct, ten days per month may be earned on road work. The division of cost between state and county is as follows: the state furnishes prisoners with clothing and supervision; the county provides equipment and all camp expenses. The convicts receive no wage.

Road work is declared to be very beneficial, as to both health and character. The efficiency of the labor has been greatly increased by the abolition of armed guards, and is now equal to free labor if properly handled. Continuation of the system under present methods is assured.

Since 1909, all prison sentences in New Mexico have been indeterminate. Having served his minimum sentence with-

out infraction of the rules of the penitentiary, the prisoner is paroled, after suitable employment has first been secured for him with some respectable and responsible person. He is required to report monthly, the report setting forth the number of days under pay, number of days idle, and the reason therefor, amount on hand the first of the month, amount earned during the month, and expenditures.

UTAH

Contract convict labor is prohibited by the constitution of Utah. The bill for use of prisoners on public roads was introduced in January 1911, and passed in March. Actual work started in June of the same year and has since been continued.

As noted before, a modification of the honor system, with few guards, was tried unsuccessfully, so practise reverted to the use of armed guards in camps. The majority of the convicts employed on road work are long-term prisoners. In one case, they were housed in a stockade, equipped with arc lights, the men having individual beds and khaki uniforms. Each guard is held responsible for ten prisoners. The state provides guards, clothing and tools. Extra commutation of ten days per month is given for good conduct.

The plan was considered extremely successful during 1911 and 1912. During the year just passed, about fifty long-term prisoners have been in use on state roads. For these there are eight armed guards. Most of the work (about twenty-nine miles in all) has been in Washington and Davis counties, for which costs will be given later. Construction is under the direction of state road engineers. The convicts are said to accomplish as much as ordinary laborers; yet the cost, on account of the expense of guarding, must be greater than under the honor system. Because of the success of the system, most of the counties desire the assistance of convicts in building their roads, and the continuance of the system seems assured.

COLORADO

Colorado, in extent of development of convict road work, takes precedence over all other western states. Although pro-

vided for by law as far back as 1905, a start was not made until 1908, and the bulk of the progress has been during the present prison administration, since 1909, under Warden Thomas J. Tynan.

The law provides that upon request of a majority of a county's road commissioners, the warden of the state penitentiary at Canon City may, at his discretion, allow a squad of convicts with competent overseers to do road work in that county. The state furnishes clothing—blue or khaki—while the county provides for all feeding and housing of men and teams, for tools, materials and additional charges of guarding. Construction work is under the supervision of the warden or his proper representative, the state highway department performing the engineering service.

Convict road work started in May 1908, under armed guards. About April 1909, the honor system was introduced, and is still in favor. During 1909 and 1910, there were about 100 convicts working on an average. In 1911 this number was increased to about 200, and toward the end of the year to 300. At present, fifty per cent of the penitentiary inmates are at work outside on the roads or on a farm adjoining the prison, and the warden estimates that seventy-five per cent of ordinary prison inmates could be so used. During the biennial period ending November 30, 1910, about fifty miles of roadway was constructed, and in the succeeding period ending November 30, 1912, about 300 miles, the increase being due to added numbers, greater efficiency, and better working conditions. One of the most noted pieces of roadwork was accomplished on the now famous skyline drive, extending some six or eight miles from Canon City along the crest of a "hog-back," and almost overlooking the Royal Gorge of the Arkansas. This and other roads, notably the new Santa Fe trail, have opened up some of the scenic wonders of the state.

A real honor system is in vogue; and to this the success of the work is largely credited. Camps of from thirty to fifty men usually, or even as many as one hundred, are under one or two overseers, with subordinates, and such camps have been located even as far as three hundred miles from the peniten-

tiary. All vestiges of physical restraint—guns, stripes and stockades—are absent. The convicts themselves prefer to do this kind of work rather than any other. As an extra inducement, there is given a regular commutation of sentence amounting to as much as ten days per month, and, in addition, a month further reduction for the first year's road work, two months for the second, and so on to a maximum of six months. The penalty for breaking faith is the return of the convict to prison, and loss of all credits.

The health of the men is considered well-nigh perfect. Work is continued the year round, new detachments of convicts being continually sent out to make up for those who are paroled from camps. It is estimated that the men are fully as capable and efficient as free labor. The authorities consider convict road work a success in every way, and anticipate its continuance and enlargement.

MONTANA

The contract system for convict labor in the state penitentiary was abolished in Montana in June 1908. To provide some employment for the prisoners and to relieve congestion in the buildings, which were so overcrowded that one-quarter of the inmates had to be housed outside the walls, several plans were inaugurated during the spring of 1910, among them that of using convicts on public roads. This highway work has been continued since that time.

In the two and one-half years the honor system has been practised, results satisfactory from the standpoints of reformation and of public economy have been effected. An allowance of fifty cents per convict per day is made by the state to cover maintenance, guards and other expenses; the counties pay for equipment, materials and all excess costs over that met by the state. Firearms are not allowed in the camps. For squads of from fifty to one hundred men, three guards, two for day and one for night, provide the only surveillance, which partakes in character more of the nature of supervision of work. The eight-hour day is in vogue. There is no artificial restraint. Clothing is of cadet blue, the food is

of good quality, and the shelter is under tents. In addition to the "good time" allowed by law, there is an extra commutation of ten days for each month's work.

In spite of the out-of-date machinery used, a remarkable showing for the work has been made; this is attributed to the vigor and enthusiasm of the workers. Up to May 1912 about forty-eight miles of road had been built, much of it through solid rock. The importance of some of this work is apparent from the fact that in one case road distances between important points were shortened forty miles by means of seven miles of difficult construction; and in another, sixty miles were eliminated by building thirteen.

The number of men employed has varied, usually being about one-third of the total number in the penitentiary. In 1913 the force numbered 225. During the first two years, the percentage of escapes averaged less than one per cent—last year, the loss was six. Ninety-five per cent of the paroled prisoners make good, a much larger proportion than in most states. Repeated requests by counties for the road-making convicts indicate the favor in which the whole system is held. At present, an effort is being made to invoke state aid for counties in order to provide for the continuance of convict road work under the honor system.

OTHER WESTERN STATES

East of Colorado, various states are moving to inaugurate a system of convict labor on public highways. Some little work has been done in Kansas, Oklahoma, Minnesota, Missouri and Iowa, which may now be briefly described.

In Kansas, the law allows road construction by penintentiary inmates, but little has been done under this provision, because the prisoners are already so advantageously employed in other state industries. The output of the prison mine and brick yard is used for the various state institutions, while the products of the farm help feed the prisoners. Some income is realized from the twine plant. Previous to 1911 nine miles of road had been built, and since then about two miles of macadam have been added. Mention is also made of three

and one-half miles of brick road from Lansing to Leavenworth, built by about thirty convicts on the honor system, and also the road from Kansas City to Lansing, on which about twenty-five prisoners were worked during 1912. The present intention is to continue prisoners in the twine factory and the brick yard, in the mines and on the highways, the last being the goal to be earned by good conduct. It is also intended to give two-thirds of the prisoner's earnings to the state, and one-third to his family. Of 850 men in the state penitentiary, about one hundred could be trusted without guards under the honor system. Twenty-six men have been so used during the last year.

For some time, state convicts in Oklahoma have been used in stone quarries, and during 1911 county prisoners also were used in some districts. In August 1911, when a plan was on foot to utilize the prison population in building a cross-state road from Kansas to Texas, the governor offered to exercise his pardoning power in giving one day in four off their sentences for prisoners so employed, although the state itself could not commute the sentences in this manner. During 1912 many prisoners were used on roads near the penitentiary at McAlester, living in tents, and getting supplies direct from the prison. In the fall the force amounted to 150 men, under one officer (white) and with a prisoner as watchman at night. There were no armed guards, and only one escape was recorded. Little attempt at scientific road work was made, as there was no engineer. The main purpose was to keep the workers busy.

The Minnesota law authorizes the crushing of stone at the state reformatory at St. Cloud, for use by the counties, on payment of the transportation charges. During the biennium just finished 6248 cubic yards were delivered for state roads, at 25 cents a yard, although to outside buyers from $1 to $2 per yard was charged according to the grade.

IOWA

In Iowa in 1912 a special committee was appointed to investigate the management of the penitentiary at Fort Madison,

which committee recommended "that under revised laws, from 50 to 75 state prisoners could be profitably employed on the highways; that they should be carefully chosen by the warden from those who have served the longer part of their term, such selection being conditioned on satisfactory prison record, good habits and willingness to do road work; that they should be placed on their honor and receive a wage, but not be allowed the use of intoxicants nor association with free citizens."[1] Prior to this time the only road work was the preparation of material, but as the result of the investigation a statute was enacted to the following effect:

Any able-bodied male prisoner may work on the roads unless his character or disposition make probable his attempt to escape or unless he is likely to be an ungovernable prisoner or to violate any of the laws of the state while engaged in such work or unless his health would be impaired by such labor. No prisoner who is opposed to working upon the highways shall be required to do so. The prisoners are at all times under the jurisdiction of the warden of the institution, even when performing service under the honor system, the warden designating guards, officers and agents to direct and supervise such prisoners. The highway department shall supervise the work, but may coöperate with the boards of supervisers and local officials in the performance of the work. The board of control and the warden shall prescribe the condition and manner of keeping and caring for the prisoners while away from the institution. Whenever a county board of supervisers or other local officials desire to use prisoners upon the highway within their jurisdictions, they may apply to the state highway commission, specifying the number of men desired, the character of work and the amount they are willing to pay for the labor. If the highway commission can supervise the work and believe the prisoners can be safely and advantageously employed at said place, it shall submit the matter to the board of control. The board of control and the warden shall ar-

[1] *Report of the Committee Appointed to Investigate the General Management of the Iowa Penitentiary at Fort Madison,* 1912, pp. 35-37.

range details with the local officials, including the compensation to be paid the state for the use of such prisoners. Local officials authorized to make road improvements are permitted to employ prisoners and to pay for such services from any funds available for road or bridge work, whenever in their judgment such prisoners may be employed advantageously. The board of control is authorized to allow prisoners working upon the highways of the state such part of their earnings as the board shall deem just and equitable over and above the cost of maintenance of such prisoners and may deduct a part of such earnings and forward direct to families or persons dependent upon such prisoners for support. The board of control and warden may also provide for the deposit of earnings of such prisoners in a bank or banks to be given said prisoners upon release, except such part as may be allowed for current expenses. Prisoners working upon the highways shall not be required or permitted to work in clothing which shall make them look ridiculous or unduly conspicuous.

Although but few months have elapsed since the passage of the statute, Attorney General George Cosson, in a letter to the National Committee on Prison Labor in November 1913, reports:

> We have a little prison camp doing work near the state agricultural college at Ames under the supervision of the highway commission. These men are on the honor system. We will send you if possible some photographs of the camp. The contract provides that the men shall receive two dollars per day and if it develops that they do the equivalent amount of work performed by free labor, they shall receive $2.50 per day. This beats working under the contract system at sixty cents per day or eighty cents as the men at Anamosa receive.
>
> Up to date the money, in addition to paying their maintenance, has been funded for the use of the prisoners. We had one escape by a young fellow who was not quite right in his head. He was recaptured and there is some suggestion of sending him to the institution for feeble minded. It was a mistake to put the fellow on the job. Aside from that there have been no escapes at all and the men have been very well contented. They are working under almost normal conditions except of course that they are kept in their camps at night and not permitted to mingle with free citizens.

As I said before, they are paying their own maintenance, and a very substantial amount will still be left for themselves and families.

ILLINOIS

Illinois was a pioneer among the northern states in employing its convicts on public works. Inasmuch as sentiment has always been against the exposure of prisoners to the public view, they have been used only in stone crushing within the penitentiaries at Chester and Joliet, as authorized by law in 1905. Since that time stone has been crushed sufficient to cover about 400 miles of road. The material is furnished free at the penitentiaries, the townships paying the freight charges. These charges, although less than the regular rate, still limit the usefulness of the stone on account of the expense of carrying it to more distant districts.

The convict force employed at the Chester penitentiary, being larger than at Joliet, produces cut stone and fertilizer (pulverized limestone) as well as crushed rock. At the Joliet penitentiary, where only stone for the road work is crushed, the limit of capacity has been reached, except in case of a car shortage, which frequently occurs. Here the machinery is the controlling factor. The combined output of crushed rock by both penitentiaries for the last five years has been as follows: 1908, 120,240 cu. yds.; 1909, 136,789 cu. yds.; 1910, 103,309 cu. yds.; 1911, 152,165 cu. yds.; 1912, 154,032 cu. yds.

Although the amounts of stone crushed have thus been successfully increased, the demand has always exceeded the supply. Not all the prisoners are physically fit for this work and those who are able to do it perform only one-third the amount that free laborers would.

Continuation of this work is assured by its present success. In addition, the new governor [1] has put himself on record as in favor of convict labor in actual road construction under the honor system as in Colorado.

MICHIGAN

The Michigan laws of 1911 provide that state convicts may

[1] Gov. E. F. Dunne. Inaugural address, Jan. 13, 1913.

be employed on the public roads or in the quarries of the county which bids highest for their services. If guarding is necessary, its cost is borne by the prison authorities, but other expenses, as transportation, equipment and subsistence, are met by the county. No state prisoners have ever been used under this act, but county convicts, especially in Kalamazoo County, have been so employed with great success.

Under this system, it was predicted by the originator, Mr. William M. Bryant, chairman of the county road commission, that crime could be reduced by half and the tramp nuisance eliminated; this has been accomplished. Work started in the fall of 1909. At first the men were boarded by a nearby farmer and sheltered in a rented house. In six weeks the jail attendance fell off to such a marked degree that two gangs of 35 to 40 each were reduced to one gang of only 2 prisoners. During the first five months the decrease in the number of vagrants amounted to over 2300. In one month only 1 vagrant was arrested, and for six months the total arrests numbered only 10. The difficulty with this work has been the lack of prisoners, reinforcement by free labor being necessary to make up a single gang. As all are short-term prisoners, no guards are necessary. The men are on their honor, and similar in appearance to free laborers. As a reward, $1.50 per week is allowed for satisfactory work. The success of the Kalamazoo system has induced other counties to adopt similar methods.

OHIO

Ohio's only experiment in employing convict labor in actual highway construction was made in the summer of 1912 on a road south of Columbus under the direction of the state highway department. In this work from 17 to 25 colored convicts were employed, conveyed seven miles from the penitentiary to the work and back by an auto truck which during the remander of the day was otherwise used. The road was built of brick, by various methods, so that a representative performance by the prisoners was difficult, on account of the frequent change of operations, but where there was a fair chance, in-

telligent and efficient work resulted. One unarmed guard accompanied the men, directing the work. Even though the gang stretched out at times for half a mile along the road, no attempt at escape occurred. All the men, of whom several were life termers, were on their honor. Under an arrangement with the state board of administration, the highway department paid $1 per day for the services of each convict, none of which was credited to the prisoners.

Public sentiment is now in favor of paying a wage, and a bill is pending providing for an allowance of a daily wage for each convict. Making due allowance for the handicaps under which the work was conducted, the results have caused widespread satisfaction, so that the authorities favor working all the prisoners except the most dangerous. A bill has been brought before the legislature providing for this development, and it is said to have strong support from the governor.

There has also been some stone crushing by state prisoners, as provided by law in 1911. During the past year, 33 convicts have been kept busy at the state quarry, all under the honor system. The results are highly satisfactory from the standpoint of the moral effect on the men. Both highway construction and stone quarrying with convict labor seem to be permanent features and destined to rapid development in Ohio.

NEW YORK

State convicts have never been worked on state highways in New York, but a few counties have employed their prisoners on the roads, notably Onondaga County, in which Syracuse is located.

By the laws of 1912 it was provided that state convicts could be used near the Clinton and Great Meadow prisons, and $10,000 was appropriated for that purpose. It is stated that the men accomplished $6,000 worth of work at a cost of $700. There has also been considerable road work near the new Great Meadow prison as previously noted. According to the latest report, 25 men have been employed near Dannamora,

living in tents about seven miles from the prison, and of these but one man escaped.

For the past two seasons, Onondaga County has conducted a very interesting experiment to determine the feasibility of using the county convicts on road construction. During the year 1911, work was carried on from August 24th to November 24th. Conditions for a good showing were unfavorable; the weather was poor; eleven rainy days occurred in October. Construction was difficult; the work was heavy and partly in quicksand; supplies had to be imported; it was necessary to ship stone at the highest rates; the supervision was inexperienced; and the location was distant from the penitentiary. Admittedly, this stretch of road, between Amboy and Warners, was chosen because of the difficulties attending its construction. The men were sheltered in a farm house which they themselves repaired, making it habitable. Half a dozen did the housework, cooking and laundry work.

The average number of men was about 35. The working day was 8 hours, with 1¾ hours for dinner. The guards were for supervision rather than discipline, and the men themselves were unhampered by chains. Although over 100 different men were employed, no attempt at escape occurred. From the standpoint of the convicts there was much encouragement, as they remained healthy and willing to work, although inexperienced and receiving no wage. So satisfactory was the trial that the board of county supervisors determined to continue it the next year, which plan was carried out, the work being on a larger scale.

For the work of 1912 the arrangements included:

1. The payment of 7½ cents per convict hour to the penitentiary out of the county road fund, for work on the road.

2. The use of not more than 5 keepers for a road gang of 60 prisoners.

During the working season of 6½ months (173 working days) the convicts built about 4 miles more of the Amboy-Warners Road. Construction along lines similar to the previous year resulted satisfactorily. While the prison popula-

tion of Onondaga County decreased 22.6% in the two years, that of surrounding counties increased 12% and 25%. Evidently road work tends to diminish the number of criminals, as Kalamazoo County, Michigan, discovered. Disciplinary measures were not found necessary; the stone quarry back at the penitentiary was always a possibility for misbehavior. The prisoners were healthy and worked well. One man escaped and two more attempted escape. One of them was brought back by a farmer and the other returned voluntarily.

Instead of the farm house, a combination of portable farm buildings was erected by the county at a cost of $1,500. These buildings were made of good-quality lumber and were arranged in panels, with all parts interchangeable, capable of being readily collapsed and moved as occasion required. They were well lighted and ventilated, and proved to be very satisfactory throughout the season. In the latter part of the fall, stoves were installed, and the prisoners were kept in comfort at all times. Although in the midst of a busy farming community and near three school houses there was no complaint of misconduct during the whole season.

As a result of the year's work, the special committee appointed to investigate and report, recommended:

1. That the work be continued upon a larger scale.

2. That the number of guards be decreased and an honor system be established, discarding the stripes except for discipline.

3. That the working day in the quarry be decreased to 8 hours, exclusive of traveling time to and from the penitentiary.

4. That as a result of satisfactory conduct and conscientious work, an improvement in rations be accorded, and possibly the use of crockery instead of metal dishes.

The recommendations were adopted. These considerations together with the complete cost data, discussed elsewhere, throw very interesting light on the convict road question. The Syracuse experiment is the most advanced yet attempted in the East and will be watched with interest. Great credit is due

the officials for their persistence and for their success in the face of opposition and skepticism.

State Superintendent of Highways Reel, before his recent retirement, expressed himself as favoring convict labor for roads under state management thus saving the commonwealth "millions of dollars." Certainly from the data at hand regarding convict labor and from the consideration that in a few years New York will have expended a hundred millions on improved roads, such a statement appears within the bounds of possibility.

NEW JERSEY

Up to December 1913, state convicts had never been used on roads in New Jersey. It was thought that the prisoners would not work because they knew the authorities could do no more than return them to the penitentiary. Mercer County had used a few in its stone-crushing quarry to some advantage. In Essex County penitentiary also there was some stone crushing attempted by hand labor, the average earning of the convict being about 15 cents a day.

Following the lead of Colorado, other western states, and Onondaga County, New York, New Jersey in the spring of 1912 enacted laws provided for working her prisoners on the public roads, thus becoming the pioneer among eastern states in using convict labor as she had previously been in inaugurating her state-aid system. It was expected in this manner to relieve the congestion of the state prison, where there were but 1300 cells for over 1450 men. The bill, passed in April 1912, provides that the state commissioner of public roads or board of chosen freeholders of any county may make application for state prisoners, designating the number desired. The prison labor commission, in conjunction with the governing body of the penitentiary, may then decide the number to be allowed, cost of transportation, maintenance, and compensation, and may so enter into an agreement with the counties. Funds for the highway work may be expended in housing and feeding these prisoners.

In September the state road commissioner requested men

for work in Burlington County. This was refused by the board of prison inspectors on the ground that the responsibility for escape was not fixed. This objection was well taken. The authorities assigned finally 16 men for work in Mercer County, where the state penitentiary is located, so as to return to that institution every night.

The work started in the middle of December near Trenton under one foreman with two deputies carrying concealed arms,—grading clearing, cleaning and general repairs. The crew travels to and from the penitentiary in a large stage and is fed on the road, working about 8 hours a day. Instead of prison stripes or chains, the uniform is gray. The men are for the most part long-term prisoners, with good records, having only a few months more to serve. Although unaccustomed to this work, they have given great satisfaction, appreciating the opportunity for outdoor work, so that after two months the authorities are enthusiastic in demand for a more general adoption of the system.

Present plans anticipate the employment of about 200 to 250 prisoners during the coming season, on both repairs and construction, thus materially relieving the overcrowded jail conditions and saving many thousands of dollars. For this the state is to pay 50 cents per convict per day. The anticipation is that auto trucks will be used for transportation near the penitentiary and camps established in more remote localities. It is urged that although the work is paid for at a low rate (labor being actually worth about $1.75 per day) the counties could not afford to expend more; nor could outside workers be obtained, so that free labor is not injured at all.

It is planned that the amount paid by the road department for labor shall go to the convicts' families in case of married men or those having others dependent on them, and in other cases shall be held as a fund for the benefit of the convict at release, but not necessarily to be paid to him in a lump at that time. It is also planned to parole good men for work as patrolmen on the highways.

This state work, together with that authorized for the counties about the same time, will receive the close attention of all

who are interested in the welfare of convicts or the development of the public roads. Its success and the cost data obtained may influence policies of many other northeastern states in regard to convict road work.

In the foregoing accounts, little attempt has been made to comment on more than the most important cases. Except in one or two instances, no reference has been made to the work of counties—and there are many of them that have employed their convicts on roads. The truth is that county attempts have not been so thorough as those of the states. The counties have lacked a sufficient number of suitable prisoners to form an efficient gang, as well as adequate and experienced supervisors, and funds to furnish camps and provide equipment. Above all, they have not had strong enough public sentiment to prevent mismanagement and abuses.

County administration is crude at best; county boards of supervisors are seldom run with any idea of efficiency, and the rules and regulations laid down by them have not been affected at all by the movement which has improved our city governments. The convicts, whether under a sheriff, a justice of the peace or a specially appointed warden, are of all kinds and sorts. Classification is almost impossible unless a number of the counties combine together and pool their convicts. Petty politics, petty graft and petty oppression mark the attitude of county administration in things penal. A few striking instances of county road work may be cited; in Massachusetts, men from the Worchester jail built roads for a camp on Mt. Wachusett,[1] and in Lawrence County, Pennsylvania, convicts were employed on the roads.[2] Granted that the plan of county work has already shown marked success elsewhere, it is unpopular in certain sections, because of the differences in climatic and geographical conditions, character of prisoners, and sentiment. Yet all are glad to see some other community try the scheme. Hence, advocates of road building by county convicts are united in crediting New Jersey and

[1] *Boston Post,* May 26th, 1912.

[2] *Newcastle (Pa.) News,* July 26th, 1911.

Onondaga County, New York, not only with common sense but with courage and consideration for their convicts.

COST DATA

While the employment of prisoners on roads is a matter of character-building rather than financial gain or loss, adoption or rejection of the plan has been made contingent upon cost. Inevitably we must consider whether the scheme involves a credit or deficit in the public treasury. For convenience, the cost data have been collected for comparison and discussion. They are given in tabulated form below.

It is unfortunate that the information of actual cost is often generalized, meager and indefinite, rather than itemized. The table represents practically all that has been gathered from official reports, newspaper clippings, and private correspondence in the files of the National Committee on Prison Labor. In justice, it must be presupposed that more complete records have been kept—the misfortune is that they are not available. Forty-six per cent of the items recorded are from Washington and Colorado; the remaining fifty-four represent nine other localities.

The unit costs are obtained by the four following methods:

(1) By comparison of the actual cost with the value of the work, estimated according to the probable expense if done by free labor. The latter cost is calculated according to the relative natural efficiency of convicts and free laborers, some students being of the opinion that convicts are naturally men of a lower grade than free laborers.

(2) By comparison of the resultant costs with the average costs for similar localities and conditions where work has been done by private contractors.

(3) By obtaining previously or subsequently a contractor's bid on the work, and then comparing this with the cost.

(4) By ascertaining the value of the work done, computing it from the engineer's measurement of qualities and prevalent union prices for the locality and conditions, and then comparing with the actual costs.

	Location of work	No. of convicts	Cost per convict per day		Total cost	
			Guarding	Subsistence	Per convict per day	Per job
1	Lyle, Wash.	50(?)	$ .478	$ .636		$36,845
2	Wash. State, 1909-10					
3	Method Rv., Wash.	30				
4	Lyle, Wash.	84				1,567
5	Lyle, Wash.	84				1,892
6	State Rd.,[1] No. 6, Wash.					
7	Oregon; Medford to Crater Lake			.30	$ .75	
8	Oregon, 1911			.50		
9	Tempe, Ariz., Salt R. bridge	50	.563	.478	1.09	
10	New Mexico, 1912					26,050
11	Utah			.36		105,565
12	Elkhorn, Colo.	35			.25	
13	Mesa Co., Colo.	30-60				2,700 per mile
14	Ute Pass, Colo.					3,403
15	Colorado, 1909-10	225			.36	54,500
16	Colorado, 1911			.30	.50	
17	Wyoming, 1911			.29	.387	
18	Missoula, Mont.					1,280.31
19	Sanders Co., Mont.					8,798.09
20	Cole Co., Mo.				.46	
21	Green Co., Mo.			.40		
22	Kalamazoo, Mich.				.40	[2]
23	Onondaga Co., N. Y., 1911,	35				5,900
	1912	50	.412	.277		24,337.66
24	Clinton Co., New York, July–Nov, 1913	161	.234			8,110.50
25	New Jersey, Camp No. 1, 1913					6,743.12
26	Camp No. 2					2,122.93
	Camps 1 and 2					8,866.05

[1] Economy of convicts an open question in this case.

Two miles at $1,972 a mile.

COST DATA

Value of work		Saving		References
Per convict per day	Per job	Per convict per day	Per job	
	$119,110	$3.69	$82,265	*Good Roads*, June 26, 1812, p. 722.
		3.95		*Spokane (Wash.) Spokesman Review*, April 14, 1911.
		4.03		*Good Roads*, January, 1012.
	3,123	1.66	1,556	*Good Roads*, July, 1910, p. 274.
	4,322	2.60	2,430	*Ibid.*
				Report of State Highway Commission, Sept. 30, 1910.
$2.50		1.50		*Sunset*, San Francisco, April, 1912.
				Good Roads Year Book, 1912, p. 294.
				Official correspondence.
	64,969		38,919	*Warden's Annual Report*, November 30, 1912.
	198,682		93,117	*Salt Lake City News*, December 21, 1912.
$2–3		1.75		*Salem (Oregon) Statesman*, January 29, 1913.
				Press reports.
	8,354		4,951	*Colorado Springs Gazette*, May 13, 1911.
	212,160		157,660	*Warden's Biennial Report*, November 30, 1910.
2.00		1.50		*Good Roads Year Book*, 1912, p. 285.
				Good Roads Year Book, 1912, p. 298.
	12,816		11,535.69	Address of Atty.-Gen. Galen at Montana Good Roads Congress, Anaconda, Mont., July 8, 1912.
	171,400		162,601.91	Address of Atty.-Gen. Galen at Montana Good Roads Congress, Anaconda, Mont., July 8, 1912.
				Official Correspondence.
				Good Roads Year Book, 1912, p. 291.
				Engineering Record, February 24, 1912, p. 223.
			None	*Engineering Contracting*, February 28, 1912
			None	Report of special committee to Board of County Supervisors.
	5,933.02		None	
	3,042.00		919.07	
	8,975.02		108.97	

The first process may be illustrated in the following manner: If the prisoners seem to work as hard as free laborers, who are worth $2 a day, they, too, are considered worth that much, and if the gross costs for their keep are $1, a clear saving of $1 is indicated. The inaccuracy of this method lies in its assumption of the equal efficiency of convict and free labor. It guesses at a figure which may easily be obtained exactly. The correct order of reasoning is exemplified in the other three methods. Items number 7, 12 and 14 in the cost data table are figured by this first method.

The inaccuracy of the second method, though less than that of the first, lies in the possible errors of judgment in gauging the relative expense of construction in two "similar" locations, and in allowing for the inequalities. For this reason, the actual gain or loss in the Onondaga experiment with convict labor cannot be estimated. It is impossible to tell from the accounts just how much the stretch of road built by the prisoners would have cost if done by free labor.

In the third case, which is really the same as the fourth,—the two are the same problem—the cost with free labor is actually obtained, that is, the lowest contractor's bid for the work becomes the standard with which the costs with convict labor are compared. (The costs for Colorado during 1909 and 1910 were obtained in this manner.)

In the last method, these actual free-labor costs are found from the engineer's quantities (which the contractor in the third case would need for making his bid), the unit costs being assumed by the engineer, probably as accurately as the contractor could assume them. This method does not involve the trouble of advertising for bids, or the unfairness of putting the contractor to the expense of figuring the costs without any intention on the part of the state of letting the contract. (The costs of work in the state of Washington are obtained by this method.)

The whole problem of cost-keeping for convict labor on roads resolves itself into the accuracy of securing the costs by free outside labor, as a basis of comparison with the costs actually found by using the prisoners.

In compiling the table, the items were sometimes obtained by information from more than one source. Newspaper clippings, although not always reliable, furnished much information, which, on account of the lack of other data, has been included. The matter of interest and depreciation for equipment has evidently received scant consideration. Apparently, the common method has been either to deduct this whole cost from the first season's outlay, or to ignore it entirely. In the latter case, costs and profits have been figured as gross sums. Indeed, this is all too common a method. Whenever a definite understanding regarding the manner of computing the costs was given, the necessary corrections for interest and depreciation, evidently only approximate, have been applied, so that it is felt that the table is essentially correct, at least enough so for the purposes here intended. However, it would seem desirable that more complete results be published in future. It is necessary for the state prison or highway authorities to know in just what manner their money is being expended; or else, a gross waste in one class of work may be covered by economy in another, so that a surplus or saving for the work as a whole may be shown. Public work of this sort differs from that of private individuals, in which a contractor's figures of costs are to him as much a part of his stock in trade as the manufacturer's patented processes. But in this case, where convict work is almost in its infancy, the attitude should be that of coöperation, for only by comparing results and profiting by the mistakes of others can the states make rapid progress.

The fallacy of any conclusive deductions from the cost of road per mile is clear. Thus, the work of item number one, at Lyle, Washington, is apparently high, $24,000 per mile, yet the engineer's estimate shows that it would probably have been 230 per cent higher if it had been done by contract. This same example also illustrates the fallacy of any mere estimate of work done, even by an expert, without the substantial data being given, as in this case, showing the exact yardage of excavation and masonry. In this particular instance, there was also given the average expense incident to working one convict

one day, including superintendence, guarding, subsistence, clothing, camp equipment, explosives and building materials. These figures are very handy for computing the average saving per convict per day and also for use in subsequent estimates of gross costs; but for this discussion they need not be considered.

As will be noted, little attention has been paid to work done by counties, which has usually been on so much smaller a scale that it would tend to give misleading impressions. It was also necessary to discard some of the published results of state work, notably in the case of one state prison report where two widely separate and inexplicably different figures were given indicating the cost per man to the state for each convict one day on the road.

However, the main facts regarding the costs of road work by convict labor stand out clearly. The column showing the saving indicates generally more than a mere balance in favor of convict labor against other methods of construction; it shows a large profit. Besides the direct economy indicated, there is often an indirect one resulting from the fact that much of the money laid out for the state highways finds its way into the funds of the penitentiary. Inasmuch as both the roads and the state institutions are supported publicly, an increase in income for the prison benefits the state as much in the reduction of tax as does the decrease in the cost of highways. Hence the two together should be credited as resulting from the use of convicts on roads.

The unit costs of guarding and subsistence, while by no means complete, at least indicate a fair degree of uniformity. The average cost of subsistence is found to be \$.40 per day per man; while the expenditure for guarding in those cases where costs were given averaged \$.484. The striking thing about these figures is that the expense of guarding is 20% more than that of feeding. This tends to bear out the statement of the advocates of the honor system, *viz.*, that the expense of guarding takes away all the profit that might otherwise accrue from the employment of convicts on roads.

In justice to the facts of the Onondaga work, some ex-

planation of the figures for 1912 is due. For this work the overhead charges due to superintendence and guarding were unduly high, because there was a small working force of prisoners. Increasing the number 50% would result in practically no additional fixed charges, and so would decrease the cost of the work 10%. Likewise an increase in length of working day from eight to nine hours (the usual number of hours on state road work is ten) would reduce the cost for both labor and teaming by an additional 10%, making a 20% saving in all. These changes with other suggested savings in the operation of the county road quarry, which might affect county and private road contractors alike, would cause considerable reduction in cost. In spite of the apparent lack of pecuniary gain, the system achieved sufficient success to secure the hearty approval of the authorities and a recommendation for its continuation on a larger scale. The other items require no further comment, inasmuch as the published details of surrounding conditions give little more information than that shown in the table.

The significant deductions from the study of these tabulated results as a whole are:

(1) That there is a general and considerable saving in the use of convict labor for road work over other methods of construction, this saving being quite independent of locality and types of construction, although influenced by the size of gang employed.

(2) That the cost of feeding convicts on road work is uniform for all those cases in which data are available, and averages $.40 per prisoner per day.

(3) That the cost of guarding alone has amounted to about $.48 per convict per day, this item being 120% of the average expenditure for subsistence.

UTILITY OF CONVICTS FOR ROADS

The experience of states where the system of convict road building has received a trial enables us to answer quite positively the query as to whether this work is a suitable substitute for methods of employment now in vogue. It has been shown

that the present method is wrong; it remains to indicate why the proposed one is right.

The question of competition with free labor comes first, not because of any added importance over the other considerations but rather because it has been made the issue in so many legislative battles wherein the contract system has been abolished. The lawmakers, while rather blind to the wrongs of the prisoners, are keen enough to appreciate the grievances of free labor, their constituency.

The stand of organized labor is against "unfair competition." In common with other students of the convict-labor problem, the trade unions also urge humanitarian reasons for a change in the contract system. But with labor it is a question of more than passing interest; it is a matter of self-protection, and almost of commercial life and death. Convict labor is bound to work some hardship to free laborers. The problem is to find the kind of work providing a maximum of benefit to the prisoner and the state while at the same time causing a minimum of friction with free labor.

The "unfair competition" is most easily explained by an example: Prisoners are employed in making articles of clothing to supply all the institutions of the state, *i. e.*, the state itself becomes the preferred market for their commodity. This replaces the work of an equal number of free laborers but affects only a small percentage of the total workers. Against this plan, let the prison-made goods be placed on the open market by private contractors in competition with articles manufactured outside and the whole market becomes disturbed. Instead of the small percentage injured, the whole trade suffers.

As expressed by one of their writers,[1] the dissatisfaction of the unions is on account of these "methods by which prison labor when performed for the benefit of private contractors, places the convicts' labor on the market and thereby forces reductions in wages upon large numbers and by so doing, lowers their standard of living." Instead, the solution by

[1] John P. Frey, *Proceedings of National Conference of Charities and Correction,* 1912.

work in the open air is offered, benefiting the prisoner in health, in mind, and in morals. "There are highways to build, there is farm produce to be provided, and the convicts can do all of this with a minimum of competition with free labor and with no injury to the farmer." The same writer sums up for labor in the following words:

> Briefly reviewed, the trade-union attitude towards prison labor is: (1) that its first object should be the prisoner's reformation and under no circumstances should any element of private profit enter into consideration; (2) that the labor performed by the prisoner should be of a useful nature; (3) that for this labor the convict should be paid for the benefit of those dependent on him and for his own assistance upon regaining freedom; and (4) finally, that the principal object of the state should be to protect itself from the vicious and the unfortunate, to give them an adequate opportunity for reformation, and not to derive profit from their labor.

Road work does not compete with free labor. Rather it benefits the working class in common with all others. The improvement of roads, which are public property, can be of advantage to one class more than to another only to the extent that it uses them more. Indirectly, the betterment must help everybody, in decreased costs of transportation for food and commercial products, and opportunities for social intercourse. At present, the labor on our highways is almost entirely foreign, and in amount not enough to meet the needs. Even in New York city, where many of the aliens enter, Italian labor for street construction is hard to get in the busy season. Convict road work may conceivably tend toward a slight decrease of immigration—not an undesirable effect. The possible increase of our road mileage to meet even the present need is not yet in sight. There will always be work to do. Where native Americans are now employed in road building, it is a matter of expediency rather than preference on their part, resulting from the necessity of obtaining the highways and the scarcity of suitable labor to do the work.

The special committee reporting on the convict work in Onondaga County, New York, in February, 1913,[1] after ex-

[1] *Journal of the Board of Supervisors of Onondaga County,* February 3, 1913, p. 42.

haustive investigation stated: "It is conceded by those who have made a study of the question of the employment of prison labor that the use of said labor in quarry and road work conflicts with free labor in a lesser degree than in almost any other line of employment." Opinions of the daily press and of the officials who have tried the convict road work corroborate the above view.

From organized labor itself and from a spokesman no less authoritative than Samuel Gompers, President of the American Federation of Labor,[1] comes a more sweeping approval. He says: "It is my opinion that the least possible competition of prisoners as against free labor would ensue in the building of roads which would not only be beneficial to the prisoners, but would to some extent relieve the taxpayer."

Does the convict deserve or should he receive any special consideration as to his incarceration? If so, what? Public opinion has heretofore denied any such right. The prisoner has violated the laws of the state and must be punished. He has caused the state considerable expense for arrest, conviction and then usually for imprisonment. He should pay the debt. He is a moral degenerate and hence should be imprisoned, that he may not further injure or contaminate others. This is all very true from the viewpoint of the state, but what of the prisoner? We realize now that although his indebtedness is great, financial and moral, we are under even greater obligation to ourselves, through him, for his reformation. When his term is served, his debt is paid—so the law assumes. But wherein is society benefited if he still has the weakness of mind, the inclination or desire to do evil? Morally he is sick, as much as before; he is bound again to transgress the law and to find his way back to the penitentiary, causing an added expense to the state. To get at the root of the trouble, we must "create a new heart" and substitute a "right spirit." In short our attitude is now that of reformation and not punishment.

[1] In letter to State Labor Bureau of Montana. *Helena (Montana) Record*, May 19, 1911.

The physical cure should preceed the moral. In New Jersey at least 50% of the delinquents have some physical or mental weakness.[1] In the case of the convict, the authorities realize that the man should first be made healthy.

This emphasizes the need of work in the open air, thus making preferable labor on the farm or road. For many reasons the highways are the more suited; there is greater need of roads than of farm produce; there is practically no competition such as might occur were all employed in raising produce; and the results are more directly beneficial to all the people. Physically the effect of road work on the convicts has been remarkably beneficial, as results from all the states show. The cost of medical attendance has decreased and almost vanished. After one or two months of hard work in the open air, with good healthy meals, the men have become brown and hardened, really enjoying the work and preferring it to any other form of labor.

Health regained, the moral cure is possible by means of the honor system. With men's minds on their work and with no opportunity to brood, the desire to escape decreases. Gradual increase in freedom and responsibilities gives added power to resist temptation. Self-respect comes back and with it self-confidence. Knowledge of work well done, of trust faithfully fulfilled, of being a producer instead of a parasite, gives ambition for even better things. Conscience aroused and desire for reform instilled, the redemption of the criminal is half accomplished. Instead of escape there is in some cases a positive desire to stay, and discharged prisoners often request and are given re-employment. That the men make good is also attested by the number who are afterward employed nearby on farms.

Financial results as shown in the table of cost data are eloquent proof that the road work is popular among the convicts. No such work has been accomplished except through zeal on the part of the laborers. Even contract labor with

[1] Dr. Frank Moore in Annual Report, New Jersey State Reformatory, 1913. (See *Annals American Academy of Political and Social Science*, March, 1913, "Prison Reform in New Jersey," by C. L. Stonaker.)

all its driving (under the stimulus of narcotics) with a boasted efficiency equal to free labor, has not effected such economy. The work is hard, intentionally. Otherwise the regaining of full health is difficult. But with good health comes the ability and usually the desire to do honest work after release. To offset this rigorous discipline, the food is improved in quality and unlimited in quantity. The men do justice to three square meals a day.

Nor is the road work without actual pleasure. After work sports, games, music, reading and social intercourse give the men something to look forward to. Under proper supervision there results a mental improvement greater than is usually attained in the shops. On Sundays it is possible to hold religious meetings and so attend to the spiritual welfare of the men.

Heretofore the public has been averse to employing ex-convicts, often because of unwarranted prejudice. The same feeling has caused condemnation of the exposure of convicts on public roads. But the convicts are inconspicuous in their gray or khaki uniforms working like free men without guard, and the prejudice is soon overcome. This is bound to help the prisoner. To be treated like an honest man is encouraging, while to be made subject to suspicion and distrust causes antagonism.

The convict's chance for subsequent employment is improved by such occupation. As has been pointed out,[1] most of the men would have been nothing more than day laborers in any event. There is, however, opportunity for the more skilled to develop along the lines of roller engineers, blacksmiths, masons, carpenters and other useful trades connected with road and bridge work. Competent road foremen are always in demand, and under the expert supervision recommended, no better training could be conceived. Such cannot be claimed for farming and prison manufacturing. In addition, road work has this invaluable advantage: it tends not only

[1] Joseph Hyde Pratt, *Annals of American Academy of Political and Social Science*, March, 1913.

to supply the training for useful occupation, but, more important, the physical strength and inclination to follow it.

The prime advantage to the state of any form of convict employment must be its moral effect on the prisoner; this cannot be measured in dollars and cents. The facts with reference to road work are so well authenticated and corroborated in different localities, that they are indisputable. Oregon reports 85 per cent reformed among those employed on road work.[1] In Syracuse the saving in character alone is considered to do far more than offset any possible monetary loss.[2]

This reformation certainly lowers the number of second offenders. It thus lessens state expense for policing, imprisoning, and maintaining prisoners, to say nothing of the moral and financial effect of decrease in crime. It makes unnecessary the expense of increasing prison accommodations. In addition, road work acts as a deterrent for some forms of offense, notably vagrancy, as shown in Kalamazoo, Michigan.[3] If there is anything a tramp would avoid, it is the physically strenuous labor of road work. Onondaga County, New York, found that even the more serious classes of crime were lessened.[4] The vagrant and tramp avoid these communities and the prison population decreases in proportion. This is contrary to the condition that exists under the prison contract system as cited by Governor Hadley of Missouri.[5]

The convict's wife and children are benefited by the payment of a wage, as discussed later. The family should not be deprived of the necessary material support, with the attendant possibilities for education and pleasure. Upon reformation, the family relationship is restored and the father's influence becomes one for good instead of evil.

[1] Estimate made by Governor West of Oregon as reported in the *Tulsa* (*Okla.*) *World*, May 6, 1912.

[2] *Minutes of Board of County Supervisors, Onondaga County*, Feb. 3, 1913, pp. 42-3.

[3] Outdoor Work in Michigan, by William K. Bryant. *Annals of American Academy of Political and Social Science*, March, 1913.

[4] *Ibid.*, pp. 41-42. *Syracuse Journal*, April 8, 1913.

[5] New Theory as to Punishment of Crime, by Herbert S. Hadley. *Annals of American Academy of Political and Social Science*, March, 1913.

It need not be feared that the conditions may be made too favorable, so as to be actually attractive. Even on the highways, the tendency has been toward over-severity rather than leniency. No man would undergo the ignominy and disgrace of a public trial even to gain a reputed irresponsibility and ease in work on the public roads. On the other hand, there are many who believe that the court proceedings, with their humiliation, are punishment enough and further effort should tend solely to reformation.[1]

The advantage and necessity of securing good roads at cheap cost have already been shown. It is submitted that in view of the results already obtained as witnessed by the cost data, roads cost less to the state when built by convict labor than by any other mode of construction at present employed. Convicts and roads both being state property, the maximum of efficiency is possible through their joint operation.[2]

The gangs are permanent. Although they change constantly in personnel through expiration of sentence and pardon, the changes are in small units only and they do not destroy the organization of the working force, since they can be readily anticipated. The state may be sure of the workers; there are no strikes. Thus a definite continuity of work is effected. In any construction work organization is of prime importance. In this respect the road work would be fortunate. The men are naturally of a higher type of intelligence than the average road immigrant laborer and hence the various tasks, quite simple in themselves, are readily learned, and by continued use perfected. New men are broken in as they come, a few at a time, without disturbance. The work itself being done for the state and by the state, the friction which sometimes develops in ordinary road contract work is obviated.

The choice of labor for convicts, considering its effect on their health, lies between the farm and the road. It requires

[1] Julian Hawthorne in *New York Times*, Sunday, Jan. 18, 1914. *Marshalltown (Iowa) Republican*, April 25, 1911.

[2] Making Roads Through Prison Labor, by E. Stagg Whitin. *The Review*, February, 1911.

only a part of the prison population to grow sufficient produce for the state institutions alone. More than this number, if used, would give a surplus which would need be disposed of to the disadvantage of the free farmer. Moreover it is inconceivable that the amount thus earned could be converted into any permanent, tangible public property of as great value and serviceability as the public highway resulting from the same expenditure of prison labor. It is easy to get sufficient farm produce with relatively few men; it is difficult to obtain sufficient public road mileage. Moreover the roads need not be sold to the detriment of the very persons who should be protected. Instead they benefit the public alone and impartially.

The convict should receive wage. This is not charity, but justice. If he has a family, they should get their just proportion; if not, his wage should accumulate until his release. Someone must provide for the prisoner's dependents. If their own efforts fail, charity or the state must take a hand or crime and disease will result. It is a short-sighted policy where punishment of one crime involves the committing of others, or where justice toward the prisoner results in injustice toward the innocent already too much injured. Yet this is the plan we have been following. In some states, as New Jersey and Ohio, there is provision for a state pension in such instances. This may be advisable sometimes but in the case of an able-bodied prisoner it is fundamentally wrong. A man has the responsibility for those dependent upon him even though he be in prison. Commission of crime may forfeit civic rights, but it does not remove or shift responsibility for those the criminal has pledged himself to protect and provide for. He should not be allowed to forget this. Nor is such an obligation unrecognized by the prisoner ofttimes. Can the state refuse the prisoner the privilege of supporting his family while in prison?

There is another side to the question, *viz.*, that the increase in production following the allowance of wage more than justifies its payment. This is an economic situation quite apart from the sociological. The wage should be in propor-

tion to the value of the man's services and the cost of his maintenance should be deducted from it. It should increase in proportion to the increased efficiency of the road group, while the method of standardization of labor costs should be worked out. Quite universally this plan of allowing a wage is regarded as practicable, and many states, as Oregon, Nevada and others, use it successfully. Nearly all the states favor it and there is no doubt that it is an economical as well as an equitable feature.

At the same time the prisoner has already caused the state expense enough so that the wage should not exceed his net earnings. The payment of a wage presupposes a form of employment by which the convict can earn it. Since road work shows large net earnings on the part of the prisoner, it follows that the wage is made possible by this method. And since the earnings are large, such pay is of relatively small expense to the state.

If he helps support his family, the prisoner must have some feeling of pride. A balance to his credit on the prison book at any time acts as a check on his conduct during the remainder of his term, a guarantee of continued satisfactory service. Upon release it need not all be delivered over to him at once. The amount withheld serves to check extravagance, and provides a rein over his actions until it is finally withdrawn. This money permits, first, the purchase of wearing apparel so that the discharged prisoner need not be handicapped by appearance. It then provides assurance of a livelihood until permanent work is found, and eliminates worry on that score. Further, the possession of cash creates a feeling of independence and self-confidence. With the health resulting from outdoor road work, the training for manual labor received, the reform accomplished in so many cases under the honor system, the renewed self-confidence and inclination toward real work, and the cash available to tide over the difficult period following release, the released prisoner should be equipped to earn an honest living and lead an upright life.

The striking thing about convict road work in the North is its wide range of application. The well authenticated re-

ports of state work to date show that it is capable of use under varying conditions. Washington, Arizona, Colorado, Kansas, Ohio and Onondaga County, New York, present climatic and geographical conditions as varied as is possible in the northern states. All classes of prisoners have been used, from mere misdemeanants to life-termers. The system has been tried in the wilds of Washington and Colorado and in the deserts of Arizona, in the suburbs of Cincinnati, Ohio, and Trenton, New Jersey, and through the farm lands of central New York.

There are parts of New York state and Pennsylvania very similar to the country in Colorado and Washington, and these sections need good roads. The class of prisoners differs, it is said, being of a less dependable type in the East than in the West. Yet the numbers here are greater. Surely of all the large prison population some can be found as well suited for road work as in Colorado. It cannot be claimed that all are fitted for employment on the highways; some must always be under close watch and others are physically incapable. But it is claimed that the success of Colorado may be duplicated in New York; that the physical conditions and the classes of convicts employed in the two cases need not be radically different; and that the intelligence and capability of our public officials make the harmonizing of convicts and road work as much a possibility here in the East as in the West.[1]

The evidence available indicates the advisability of following the honor system, for the good of both the convict and the state. The privileges given should be such as to make road work the goal of the prisoner's endeavors. These privileges should be:

[1] *Editorial Engineering Record*, Dec. 16, 1911, p. 697.

Newark (New Jersey) News, Jan. 2, 1912.

Herbert S. Hadley, Ex-Governor of Missouri, in *St. Louis Globe Democrat*, Nov. 12, 1911.

Johnstown (Pa.) Tribune, Oct. 17, 1910.

Reading (Pa.) Telegram, Dec. 6, 1912.

Recommendations of Committee on Industries to legislature, to work convicts in New York state on the roads, as reported in *New York Press*, Oct. 8, 1913.

Albany Argus, Oct. 8, 1913.

Plattsboro Press, Oct. 9, 1913.

(1) Absence of guns and chains.
(2) Substitution of plain uniform for stripes.
(3) Commutation of sentence.
(4) Better food.
(5) A wage.
(6) Freedom after work hours.

The uniform may be gray or khaki although any color which does not attract attention is suitable.

The commutation of sentence should be in addition to what is allowed ordinarily and in amount from ten to thirty days per month's work. It ought to be enough to make a real inducement and yet not so much as to free the prisoner before he has had a chance to repay his debt to the state. In the West ten days a month is the usual amount. This works satisfactorily and appears to be about the reasonable allowance.

Improvement in quality of food over regular prison fare is necessary because the work is harder. In the country districts where the camps are located, it is quite easy to get wholesome farm produce. Many camps have an expert cook employed. Experience shows that it is economy to take care of the food rather than rely upon the doctor.

The camps must be made clean, and the sanitary rules strictly enforced. A supply of good water is essential. For well organized work on a large scale, tents make an especially good camp for summer, giving excellent ventilation and being easily packed and moved. Collapsible wooden houses are suitable for more rigorous climates. Where the work is in small jobs, a bunk wagon is convenient, holding a dozen or more men, with sides interchangeable for summer and winter. All these styles of camps have been successfully used; the choice among them depends upon local conditions.

The prisoner should be made to do some work, but choice as to its nature should be optional. There has been no difficulty experienced in getting a full complement for the road gang, its advantages being well recognized. All the convicts are not physically fitted for the work; a physician's examination will indicate this fact. As to the choice of men to whom the option of joining the honor road camp shall be

extended, the basis must be that of the possibility of doing them good. On this basis the short-termer and the life-termer, the misdemeanant and the murderer have an equal chance according as they show a capability for trust and indicate the possibility of reform.

Payment of a wage is essential, providing that the prisoner really earns something. The latter feature is of great importance. It cannot be expected that the state should pay for services not rendered, especially when the prisoner's debt is already heavy. It is impossible to know how much the prisoner earns, or whether he earns anything, without an accurate estimate of the work done and its value. Guesswork as heretofore used is folly. It is essential to have the exact amount from which the money value may be deduced. The engineer's estimates and monthly progress reports, while useful in adjusting the wage, are also good business policy. What contracting company would dispense with them? The state is surely as big an organization as most business concerns and can well attempt to follow the same line of economy and scientific supervision.

Close watch of the work not only will give the profit to the state but will show the exact state of progress, the probable time of completion, the need of various supplies, the possible use of additional laborers, and the date at which other provisions for employment of the road gang must be made. In short, this method makes possible a rational supervision from the office to suit the actual conditions in the field. Further, it gives a close estimate for later work of similar character, and enables the profiting from mistakes and from improvement in methods.

The cost data ought also to give the expenditures for subsistence, materials and equipment. Sudden changes from month to month may then be investigated. Such supervision has a salutary effect on the officials; waste is minimized and machinery is carefully handled. Since public reports have to be made, a good showing is essential to the continuance of the work. The public has a right to know how its money is expended. The best way of reporting is undoubt-

edly by unit prices. By this means the costs are reduced to terms which may be compared with practically all other work on a common basis. Knowledge of the expense incident to the use of one convict a day, including subsistence, materials and supervision, is also useful, especially in estimating the amount of money necessary to run the camp in future similar work. Total costs are necessary from the standpoint of accounts, but otherwise are misleading since they do not take into account the variation of amount and kind of work. In justice to the state itself, to the taxpayer out of whose pocket the funds come, to the convict who does the work and should receive his share of credit, and on the ground of good business principles, the cost data should be fully and carefully kept.

The question of administration is an important one. This discussion has been confined almost wholly to work suitable for state convicts. Likewise the roads to be improved would best be state roads, that class of highways constructed entirely at the expense of the state. In this way the state alone is involved. In many states the construction of roads in conjunction with the counties is illegal, since it is then necessary to enter into a contract, which arrangement is enjoined by the law abolishing every form of contract labor for prisoners. With county prisoners on county roads the same considerations apply. It is necessary that prison accounts be settled immediately since they are usually balanced every year, and the appropriations allowed do not permit extended credit. With state prisoners on state roads, the bills are readily paid by a simple transfer from the account of the state highway department to that of the penitentiary. The state and county arrangement means cash payment. Failure to pay promptly causes trouble to the prison department.

The work must necessarily be under the joint supervision of the state prison and highway departments.[1] Primarily the workmen are prisoners; they should be in charge of prison representatives to whom belongs the responsibility for proper work and discipline as much as when within the penitentiary

[1] See state histories *supra*, pp. 17-39.

walls. At the same time the construction is a part of the state road work and since the highway department provides the funds, it should provide the supervision under a competent representative to see that the construction is carried on economically and scientifically. The guards then become foremen, directing the workmen under the superintendence of the state's engineer. These two phases of authority need not conflict, inasmuch as the duties are quite separate. The attitude would be one of coöperation rather than antagonism, since the end of usefulness and economy is common to both. A similar arrangement exists in all municipal contract work, where the city or state engineer directs the work of the contractor.

Attempts have been made to combine these two duties by stipulating that the prison "guard" shall be a "competent road builder." Such a requirement is difficult to meet. Practical roadmen have few aspirations to become penitentiary guards, and guards have not had experience in highway construction. Moreover, the salary is not usually enough to attract good men. The state, however, employs competent road engineers. It has a definite system for its work and definite standards of construction. The prison organization is also satisfactory. By thus combining the two there is no reason why good results should not be obtained. This plan has already proved satisfactory and is recommended for future use.

In various states there are different methods of dividing the cost of the work. In some, where the law does not prevent, the counties arrange for the payment of a specified portion. The state usually furnishes the guards and engineering services, and the county the materials and equipment. No fixed rule governs the payment for transportation and subsistence; sometimes the county and sometimes the state provides one or both. In other cases the county pays a flat rate per convict day in consideration of these items. Where the state gives more than would be expended if the prisoners were kept in the jail, it really amounts to a form of state aid. It would seem a more equitable arrangement for the counties to pay a definite percentage of the total cost, in this way putting all localities on the same footing. The state might require a county to

raise its *pro rata* amount before the convicts would be sent. In this way difficulty in final settlement would be partly obviated. This relieves the county also. It would be uneconomical for a county to go to expensive outlay for equipment, for instance, unless there were some reasonable assurance that similar work could later be continued on as large a scale. The state, however, could well afford a more extensive and complete set of tools to be moved with the road gang.

Local conditions of necessity govern individual cases. Where possible, state convicts should be employed on state roads, and county convicts on county roads. If some arrangement has to be made with the counties, it should be such as to insure prompt payment to the state penitentiary; it should give all counties an equal chance to obtain the benefits of convict labor at the same proportionate cost; and it should be economical in operation.

The honor road camps will provide for only a portion of the penitentiary inmates; for the others several possibilities are open. The state quarries have been almost universally successful with the class of prisoners who require armed guards, and the output from them has seldom been equal to the demand. These two kinds of work connected with roads are correlated and need not interfere with each other, since they use totally different classes of prisoners.

There is still another form of employment which has not been fully recognized as yet, but which offers great possibilities, *viz.*, concrete culvert and bridge work. In many states, this is the only form of road work not permitted, on the ground that it requires skilled labor. This, while true in part, is not a valid objection. The bridge is a fundamental part of the road; it is as much the property of the state as the traveled way and it benefits the public just as much as the highway itself. Has not the state the right to use its own property (convicts) to improve its own property (roads), irrespective of the class of workmanship required?

The question of drainage is the first and pricipal one in road work. It affects the fundamental part of the road, the foundation, and should be provided for first, even if it takes all the

available funds. A dirt road, well drained, may be a good road the year round, while a macadam road, ill drained, may be almost impassable part of the time. Many a road, otherwise serviceable, has been rendered unfit for use through lack of suitable drainage. It is evident that convicts could not be employed on work of greater advantage to the cause of good roads than in building bridges to remove water from the highways, at the same time improving the surrounding property.

The objection to such use evidently arises in consideration of the competition with skilled labor. Carpenters, masons, and possibly blacksmiths might be classed as "skilled" but the large bulk of the workmen used would still be manual laborers only and "unskilled." The use of convict labor in much larger numbers for the construction of many prison buildings has seemed justifiable, so that the antagonism in the case of bridge building rests upon comparatively trivial grounds.

The work itself, on the other hand, is of a nature in many ways specially adapted to the employment of prisoners. It would take care of a comparatively large force of men within narrow limits. This means economy of supervision and also of guarding, if required; facility in providing for the keep of men and animals; and the elimination of much transportation to and from the work or of the necessity of frequently moving camp. Bridge building can be carried on independently of the rest of the work, and in advance of it. The camp may be of a semi-permanent character, remaining in one location from start to finish until a shift of force becomes necessary.

According to the size of the culvert or bridge, the number of men in the gang will be determined. If only a few are needed, in which case guarding would be unduly expensive, the honor system would find its most advantageous use. All conditions from this to the employment of a large force under heavy guard in extensive work would be encountered, so that the system would provide for various classes of convicts.

A special advantage is that concrete work is more interesting than the general run of highway construction and at the same time requires a higher grade of labor even among

the unskilled. It demands a man capable of doing more than wielding a shovel. By designating a part of the prisoners for this work alone, an efficient organization would soon develop and it is believed that as gratifying results from the standpoint of costs and saving would obtain. In conjunction with the quarry and the highway proper, the bridge construction would afford a full complement of work, providing elasticity to the whole system, whereby almost every class of convict labor would find the opportunity of doing good work for the state.

The road of a few years ago, built of telford, macadam, or gravel, cannot be economically used today in many sections of the country, because of rapid deterioration under heavy automobile traffic. Instead, brick, cement, concrete or some sort of asphaltic pavement is used. That convicts can be useful in building brick highways has been shown by the Ohio experiments already mentioned, but as far as is known, no attempt has yet been made to utilize them for constructing bituminous pavements and surfaces. It seems that they could not be so efficiently used in constructing the latter type of highway for three reasons: (1) The bituminous and other materials are so costly that they form a large percentage of the outlay, and the labor, which the convicts must perform, constitutes a correspondingly smaller part. (2) The use of improved machinery has reduced to a minimum the amount of manual labor required. (3) Many patented processes or materials are controlled and used only by authorized private representatives. This disability as to convict labor applies only to work on the wearing surface, and does not necessarily prevent the building of the bridges and subgrade by prisoners, even in the case of bituminous roads. Whatever the type of road, the state prisoners could at least care for the grading, thereby saving the state a large amount for that item. While the wearing surfaces are subject to deterioration, and therefore are of more or less temporary value only, the drainage work and grading, properly done, are of lasting benefit with no decrease in value.

Humanitarian motives demand that a convict be worked in

the open at strenuous manual labor. Utilitarian considerations indicate that the preference be given to road work rather than to the farm. The economic aspects of the case determine the particular class of road work. The commodity which the convict has to offer is manual labor. The question is, in what way can this manual labor be turned to best account for the state? Naturally, it is in that direction where it can earn most. The experience of various states shows the greatest earning power when used in the direction of earth moving, that is, in grading. This item, especially throughout those mountainous western states where convicts have been most used, amounts to the major part of the cost in the type of roads built. It is significant also that in the important case, (Onondaga County, New York) where other items, such as stone, formed a substantial part of the cost, the saving was little if any and the financial economy was negligible. It is unfortunate that the data are so meager and the evidence is so inconclusive on this point, but it is safe to say that the greatest amount of money saved up to the present time through convict labor has been in the item of earthwork. The passing of the old and the advent of the new or higher type of road still leaves the opportunity for utilizing convict labor, since the cost of excavation and embankment forms a considerable part of the expense of all types of roads, and bridge work is essential for either the old or the new type.

This study of the convict labor problem as applied to the northern states suggests the following conclusions. Convicts should have some work to do. Labor on public highways provides the best form of employment for prisoners because:

(1) It is healthy out-of-door work.

(2) It improves morals and helps reformation.

(3) It is uniformly attractive to the men.

(4) It enables the payment of a wage.

It is the best use from the standpoint of the state and society, because:

(1) It competes least with free labor.

(2) It benefits all the people with a needed improvement at least cost.

(3) By reformation of the lowest class, it elevates the whole social order.

(4) It provides revenue to the state instead of causing expense.

(5) It decreases the amount of crime.

(6) Of all the present forms of convict employment, it gives the largest returns in money value.

Experience shows that:

(1) The system can be successfully applied under varying conditions of climate, location, and class of prisoners.

(2) As far as possible the honor system should be used and commutation of sentence allowed.

(3) The choice of convicts for honor road work should be based upon temperamental fitness rather than upon nature of crime and length of term, but acceptance should be voluntary on the part of the prisoner and dependent on his satisfactory physical condition.

(4) Of all kinds of convict employment, that on the highways should be most attractive in wages and privileges.

(5) A wage should be paid not to exceed the net earnings of the prisoner.

(6) Accurate data should be kept to show all unit costs, together with the engineer's estimates of the amount and value of the work done.

(7) The prisoners should be under the prison representatives acting as foremen, and construction work should be under the highway department acting as engineers.

(8) Concrete bridge work, grading and drainage present a very useful form of work and should be generally employed.

Although the eastern states are faced by many differences in conditions from those states where this innovation has been so successfully tried, the difficulties are not insurmountable. The utilization of state prisoners to build up road systems should prove a general benefit and a public economy in the East as it has already done in the West.

ACKNOWLEDGMENT

Acknowledgment is due to the highway and prison officials of all the states herein mentioned, for kindness in making corrections and additions to the state histories. All accounts except that of Iowa are as of March, 1913. In Iowa, such definite progress has been made during the past few months that it has been included. The files of newspaper clippings and correspondence of the National Committee on Prison Labor furnished much valuable information.

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[1] The words "Official Correspondence" refer in every case to official correspondence in the files of the National Committee on Prison Labor.

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PRISON INDUSTRIES OF THE STATE OF WISCONSIN [1]

E. STAGG WHITIN

Chairman Executive Board, National Committee on Prison Labor

THE state has a property in the labor of the prisoner.[2] The thirteenth amendment to the constitution of the United States provides that neither slavery nor involuntary servitude shall exist, yet by inference allows its continuance as punishment for crime, after due process of law.[3] This property right the state may lease or retain for its own use, the manner being set forth in state constitutions and acts of legislatures. To make this right of material value the prisoner's labor must be productive. The distribution of the product of his labor inevitably presents the problem of competition, and the unfair competition between prison-made goods and those produced by free labor has overshadowed the fundamental evil inherent in penal servitude and has caused confusion in the thought underlying prison-labor regulation by legislative enactment.[4]

The usual penological analysis of prison labor[5] into lease, contract, piece-price, public-account and state-use systems is impossible to use in an economic analysis of the labor condi-

[1] Governor Francis E. McGovern, as Chairman of the Board of Public Affairs of the State of Wisconsin, appealed, through Professor John R. Commons, to the National Committee on Prison Labor for help in reorganizing the labor of the convicts in the penal institutions of the state. Investigations were conducted during 1912 and the constructive recommendations filed with the Board of Public Affairs, December 1912. By resolution, October 1913, the Board commended the National Committee on Prison Labor and accepted the findings, suggesting their publication.

[2] The opening paragraphs of this report are drawn from the writer's work, *Penal Servitude*, published by the National Committee on Prison Labor.

[3] "Neither slavery nor involuntary servitude, except as a punishment for crime, whereof the party shall have been duly convicted, shall exist within the United States or any place subject to their jurisdiction." Constitution of the U. S., 13th Amendment.

[4] Labor Legislation of 1911, *American Labor Legislation Review*, v. i, no. 3, p. 122.

[5] Henderson, Charles Richmond, *Penal and Reformatory Institutions*, pp. 198–203.

tions involved. Economically two systems of convict production and two systems of distribution of convict-made goods exist: production is either by the state or under individual enterprise; distribution is either limited to the preferred state-use market or through the general competitive market. In the light of such classification the convict-labor legislation of recent years shows definite tendencies toward the state's assumption of its responsibility for its own use of the prisoners on state lands, in state mines, and as operatives in state factories; while in distribution the competition of the open market, with its disastrous effect upon prices, tends to give place to the use of labor and commodities by the state itself in its manifold activities. Improvements like these in the production and distribution of the products mitigate evils, but in no vital way affect the economic injustice always inherent under a slave system. The payment of wage to the convict as a right growing out of his production of valuable commodities is the phase of this legislation which tends to destroy the slavery condition. Such legislation has made its appearance, together with the first suggestion of right of choice allowed to the convict in regard to his occupation. These statutes still waver in an uncertain manner between the conception of the wage as a privilege, common in England[1] and Germany,[2] and the wage as a right as it exists in France.[3] The development of the idea of right of wage, fused as it is with the movement toward governmental work and workshops, cannot fail to stand out in significance when viewed from the standpoint of the labor movement.

In a word, the economic progress in prison labor shown in recent legislation is toward more efficient production by the elimination of the profits of the lessee; more economical distribution of the products by the substitution of a preferred market where the profits of the middleman are eliminated, in place of the unfair competition with the product of free labor in the open market; and finally, the curtailment of the slave

[1] Henderson, *Prison Systems*, p. 128; 57th Congress, 2d sess., House docs., v. 92.

[2] Lombroso, Cesare, *Crime, Its Causes and Remedies*, pp. 337-9.

[3] Roux, Roger, *Le Travail dans les Prisons*, p. 31.

system by the provision for wages and choice of occupation for the man in penal servitude.

The problem thus stated finds its explanation in the history out of which it has grown and its solution in an analysis of the conditions existing today in connection with the control of penal institutions, the use of the labor of convicts in their own maintenance and in the distribution of marketable commodities, and the methods of distribution. The educational and social value of methods at present in vogue must lead inevitably to social and constructive reform, based upon modern ethical conceptions as to the duty of the state to the individual.

Progress in the prison-labor movement during the past year has been largely in the way of administrative development to meet new legislative enactments. The frame of state government itself has had to be altered to make possible efficient business methods of prison production for departmental consumption. Discussions as to methods of adaptation have been had at the House of Governors at Richmond in December, the American Prison Association meeting in Baltimore in November, the American Institute of Criminal Law at Milwaukee in September, and the convention of the National Conference of Charities and Correction in June. In the actual readjustment have been enlisted the Board of Public Affairs in Wisconsin, the Efficiency Commission in Massachusetts, the Board of Administration in Ohio, the Board of Control and Supply in Rhode Island, and various governor's commissions and special commissions in the states of New York, Maryland, Iowa, New Jersey, Virginia and California. In other states governors, unaided by such agencies, have resorted to the pardoning power to remedy evil conditions. The direction of the movement has been shaped by the appearance of a little volume entitled *Penal Servitude*, prepared under the direction of the National Committee on Prison Labor and enthusiastically approved by the American Federation of Labor. Theodore Roosevelt included this program in his social-justice plank; Woodrow Wilson presented it as an important part of his labor record; while in numerous states the platforms of all four parties declared for the principle. The introduction of a federal-jail-commission

bill into Congress by Attorney General Wickersham marks the effort of the Taft administration to secure an accurate investigation by a competent commission, while the passage of the Booher Bill by the lower house places Congress on record against the contract convict-labor system.

In this movement away from slavery by means of scientific efficiency there is no state better qualified to lead the way than Wisconsin.

THE PRISON AS A BUSINESS ENTERPRISE

Why is the prison not self-supporting? This question has been asked by the members of each successive legislature during the last fifty years. To answer it in the light of the present movement for scientifically efficient prison management requires an analysis of prison conditions from a new standpoint. An answer to the question postulates the examination of the prison as a business enterprise. The efficiency engineer in an industrial plant must inquire as to the history of the plant's location; its working capital; the personnel of the management of its manufacturing, its selling, and its supply departments. He must know the nature and quality of the labor and the available assets of the plant in buildings and machinery. If there are reasons for failure, they must lie in the lack of development of one or more of these features, or failure to coördinate them. The examination of Waupun prison, and incidentally of the state reformatory, must be made from this standpoint.

THE LOCATION

The location of the prison at Waupun in 1851 was made against the protest of a special commissioner who was authorized to investigate the management of similar institutions in the east. He held that the town had no claims and had the disadvantage of a long cart trip for supplies. He argued for the location of the prison at Madison, saying that "the seat of government would afford a means of profitably employing convict labor in and about the construction of such buildings as may be required, and of employing the convicts in mechanical pursuits with more advantage to the state than is claimed for the location se-

lected."[1] Waupun was selected because of the urgency of another prison commissioner, the accounts proving that he profited by the long cart trip.[2] Again in 1875 a resolution was introduced into the legislature to the effect that "we very much doubt whether the state prison can be made to support itself under any system of management while located at Waupun; that its present location is too far removed from supplies and from available markets for manufactured goods, and submit to the legislature in its wisdom to determine whether it is good policy for the state longer to continue the prison at Waupun at such an immense expense to the treasury."[3] The resolution further suggests that the buildings be used for the insane hospital and that the prison be removed nearer to a commercial center.[4] A commission was authorized by the legislature to select a more suitable site, but by "oversight" the bill was never signed.[5] The building of the railway to Waupun and the increase of its facilities for handling freight and merchandise has done away with the inconvenience incident to the trucking, though the expense of the long freight haul is still a definite item which must be charged against the location of the institution. At the time of the development of the reformatory at Green Bay railroad facilities had been secured, which have been further improved recently by special agreement with the railroads. Thus the location which proved an embarrassment to the efficient development of the prison industries at Waupun, an embarrassment continuing up to the time of the introduction of the present contract system at Waupun, has now partially been mitigated by railroad facilities at both Waupun and Green Bay, and it seems probable that through the interest of the railroad commission still better rates and communication can be secured.

WORKING CAPITAL

Appropriations for the carrying on of prison enterprises have been made at intervals by the legislature, but in indefinite and

[1] *Journal of the State of Wisconsin*, 1852, app., p. 228. Report State Prison Com.

[2] *Ib.*, p. 253.

[3] *Journal*, 1876, p. 190. [4] *Ib.* [5] *Ib.*

restricted form. The original appropriations were for buildings and for the work upon these buildings, the convict labor adding to the value of the investment but producing no marketable goods whereby capital could be secured and made available for future industries. In the construction of the plant a number of small industries developed, but upon its completion, no capital being available to continue them, contractors were permitted by legislative act to take over these construction shops.[1] The ingenuity of a clever warden in 1858 found capital in broom corn raised on the farm, and by the incidental saving around the plant, began the development of a public account system,[2] from which came the state-use feature, or the sale to the state institutions of certain of the commodities manufactured at the prison.[3] Owing to the demand for goods during the civil war, a start was made in a number of industries. The small shops developed rapidly and efficiently, but the close of the war with its attendant lawlessness crowded the prisons with many more men than the meager equipment could profitably employ.[4] The need of a capital fund was brought directly home to the legislature, which, however, failed to provide such a fund. There followed a break in the market and a prison fire; the result was disaster.

The appropriation in 1868 of money sufficient only for the rebuilding of the institution, and the legislature's order that the convicts be used thereon,[5] destroyed the industries without providing the means for their revival. The building had just been completed when the panic of 1873 occurred. As a result the Corn Exchange Bank failed in 1875 with the prison moneys on deposit.[6] The failure of the state charitable organizations at the same time to pay for the goods which they had purchased involved the prison in bankruptcy, and forced the leasing of the convicts as a direct result of the failure to establish a capital

[1] *Journal*, 1856, Report of Prison Commissioners.

[2] *Wis. Pub. Docs.*, 1859, pp. 11–17.

[3] *Laws of 1863*, c. 248; *Laws of 1867*, c. 55.

[4] *Governor's Message and Accompanying Documents*, 1866, pp. 420, 422.

[5] *Ib.*, 1867, Report of Prison Commissioners, p. 324.

[6] *Report of the Prison Directors*, 1876.

fund adequate to carry out the provisions of the state-use law.[1] The state industries, crippled by lack of capital, were confronted by the contract industries which were organized in 1878 with ample private capital at their disposal. The decline of the state industries was a logical result. The agitation against the contract system that swept the country in 1887 under the leadership of the Knights of Labor again brought out the state's responsibility for supplying capital to state industries. To meet the demand for the establishment of state-use and public account industries, $100,000 was appropriated,[2] $20,000 of which was used in the establishment of the knitting and tailor-shop funds at Waupun.[3] In the knitting shop were placed the feeble-minded, the insane and the aged, so that it was only natural that the warden should be glad to accept a piece-price bid from the Paramount Knitting Co.[4] for this shop instead of continuing it as a state industry as had originally been planned, although by the piece-price agreement the shop netted the

[1] *Laws of 1875*, c. 300.

[2] *Wis. Pub. Docs.*, 1905-6, v. 3, p. 13.

[3] *Laws of 1887*, c. 437.

Sec. 1. The state board of supervision of charitable, reformatory and penal institutions is hereby authorized, whenever in the opinion of such board it is best for the interest of the state to establish in the state prison the business of manufacturing, to create a debt in a sum not exceeding one hundred thousand dollars, under the provisions of section three of chapter 289 of the laws of 1880, for the purpose of purchasing machinery and materials to carry on the business of manufacturing within such prison. But no such debt shall be created or purchase made until the approval of the officers named in said section 3, chapter 289, of the laws of 1880, shall have first been obtained.

Sec. 2. Whenever such board of supervision shall obtain the consent before mentioned, and shall determine to commence the manufacture of goods, wares and merchandise within such prison, such board shall file written estimates of the materials and cost of same desired to be purchased, and upon the approval of said officers the secretary of state draw his warrant on the treasury for the amount necessary to carry into effect the provisions of this act, not exceeding the sum of one hundred thousand dollars.

Sec. 3. In case of the manufacture of goods under sections 1 and 2 of this act, the state board of supervision shall dispose of said goods to the best interests of the state, and at the best price obtainable.

Sec. 4. This act shall take effect and be in force from and after its passage and publication. (Approved April 12, 1887.)

[4] *Wis. Pub. Docs.*, 1893-4, v. 2, pp. 12-3.

state only seven and three-quarters cents per man per day.[1] The tailor-shop, with its own working capital, and manufacturing largely for the state institutions, became the most profitable shop in the institution, earning fifty-seven cents per man per day.[2]

The contrast between the contract shops and the state-use shops was marked and would have suggested the further development of the state-use system, but at this juncture the board of control successfully killed the profitable plant. With the opening of the Green Bay reformatory many of the boys who had worked in the tailor shop were transferred. At Green Bay they worked on the construction of the buildings and in a chair factory, but the task of building the institution and carrying on the industry was too great for the warden in charge and the request was made that the profitable tailor shops be removed to Green Bay despite the fact that the capital fund could not legally be transferred with the shops.[3] We soon find, therefore, that this profitable shop, removed to Green Bay without capital, was turned over to a prison contractor for the manufacture of shirts; the original fund, amounting to $20,000, which had been used to establish the knitting and tailor shops, remained as a capital fund though it was unused for upwards of twenty years when, by appropriation by the legislature of 1907, it went into the construction of a wall and a woman's prison.[4] The remaining $80,000 of the fund appropriated in 1887 has never been used and is available today. The board of control makes mention of these funds in 1903 and suggests them as available for a new industry.[5] While part of these funds had been appropriated for other purposes than was the intent in 1887, and although there was a balance of $80,000 still available for the use of the prison industries, the legislature in 1907 appropriated an additional $125,000 for the erection of the binder-twine plant.[6] Even with this fund the development of this project has been slow, since the money had to be spent for

[1] *Wis. Pub. Docs.*, 1895–6, v. 2, pp. 19–20.
[2] *Ib.*, 1897–8, v. 1, pp. 243–4.
[3] *Ib.*, 1909–10, v. 3, p. 449.
[4] *Ib.*, 1907–8, v. 7, p. 23.
[5] *Ib.*, 1905–6, v. 3, p. 13.
[6] *Ib.*, 1907–8, v. 7, p. 23.

a building suitable for the manufacture of binder-twine.[1] An additional capital fund for the further development of the binder-twine plant was appropriated by the legislature in 1911. It amounted to $450,000, one-half of which was to be paid January 1, 1912, and one-half January 1, 1913.[2] This, with the $80,000 undrawn appropriation remaining from the fund established in 1887, remains available as a capital and rotating fund—the smaller sum of $80,000 being available for any industry the board of control decides to establish. If the capital funds now available had been available in the earlier days of Wisconsin prison administration, it seems clear that they would have prevented the bankruptcy and other embarrassments which forced the introduction of the contracting interests into the prison system. At a recent (1912) congressional hearing[3] the state board of control mentioned the embarrassment incident to the lack of capital. Such embarrassment is due to three facts: first, that the larger fund is limited to the binder-twine industry; second, that the expenditure of the $80,000 would make possible only the beginning of new industries; third, that the appropriation is unavailable for the reformatory at Green Bay. It is clear that the moneys appropriated at present are sufficient for the development of an adequate prison system, provided the legislature make the fund available for the use of the prison industries as a whole at the discretion of the governor and the board of control.

THE MANAGEMENT

The management of a manufacturing enterprise must necessarily be in the hands of persons not only competent to carry on the enterprise, but empowered to do so, and supplied with assistants equally competent. At its organization in 1852, Waupun prison was placed under the management of a commissioner elected for that purpose and responsible to no one unless it were the political powers. The only check upon mis-

[1] *Wis. Pub. Docs.*, 1907–8, v. 7, p. 449.

[2] *Laws of 1911*, c. 377.

[3] Hearing on Booher Bill (H. R. 5641) before the Senate.

management was at the polls, a situation which resulted in the choice of a new commissioner at each election; notable exceptions proved the rule. The report of 1874[1] notes that the old commissionership, from the foundation of the prison, had been a money-making office and adds, "It was presumed that the commissioner would take money out of the office." Under the circumstances it was to their credit that one or two commissioners rose above the popular conception of the office.

The uncertainty of the management of the prison under the commissioner system, coupled with the fire in 1870, resulted in the establishment in 1871 of the state board of charities and reform as a supervising body with no direct power of control. As a result of an examination by this board, and on the heels of the Corn Exchange failure, came an attempt in 1875 to establish direct control over the prisons. Over the warden, who was placed in control of the institution, was placed a board of directors, who reported to the state board of charities and reform. The addition of a sales agent in that year to the management was also significant, although the office was relieved of certain of its duties by the introduction of the contract system by statute in 1875 and in actual practise in 1878. The growth of managerial power vested in the board of directors, the warden and the sales agent of the prisons, soon pointed out the lack of power which the state board of charities and reform possessed. Furthermore, the introduction of the contract system, bringing an extraneous force into the prison, made clear the need of more power in the board at the capitol. By the laws of 1880[2] the state board of supervision was instituted, with power of control over the warden of the prison; the old board of charities and reform was continued, but its functions were limited to the supervision of the semi-state institutions and jails.

The anomaly of the two boards continued for eleven years, until in 1891 the state board of control was constituted, which combined the powers of both the former boards, controlling the state penal and charitable institutions and supervising and in-

[1] *Report of Directors*, 1874, p. 24.

[2] *Laws of 1880*, c. 287.

specting the jails and semi-state institutions. Since that date the state board of control has labored under this burden of responsibility, with a further addition to its duties of the parole work of the state. The theory in regard to the state board of charities and réform was that it should be merely a board of visitors, who personally would use their good offices to correct conditions over which they had no actual power. The function of the state board of supervision had been to direct through its accredited agents the business management of the institutions over which it had power. The board of control in combining these functions has at times confused them. The theory still prevails that the board is a board of visitation, and an attempt is made by the members to inspect innumerable jails and semi-state institutions over which it has visitorial powers, as well as to inspect as a board, and in that way control, the state institutions. The attempt to visit in this way was probably possible in 1891, when the board was created, but today it is physically impossible. The growth of state institutions in the last twelve years, while a credit to the state, has added to the burdens of the board. Furthermore, the board has not been free from politics, the appointments in all but a few instances having been made on more or less political lines. The low salaries paid have necessitated the appointment of incompetent men; or if they were competent, they donated valuable services to the state without adequate reward. No business enterprise could be successfully conducted under such conditions.

The placing of the management of the binder-twine plant under the board, thus constituted, with the difficulties of the purchasing and selling departments and of supervision over the superintendent of the shop, has already demonstrated that if this work is to be carried on successfully, the inspection of the jails and the charitable institutions required by law, as well as the mass of other details which now falls to the board, must be delegated to inspectors and clerks under it.

Thus at this time the reorganization of the board seems imperative, even if the present industrial prison system with its imperfections is to continue. For the development of any new and adequate system such reconstitution is still more necessary.

In the reorganization of the board by statute, salaries should be provided sufficient to induce skilled men and women to serve. The board should be constituted of experts representing the different lines of management in the several institutions under it. It should consist of an alienist or other medical man, cognizant of psychology and medicine; a lawyer cognizant of criminal and administrative law; an educator competent to view the functions of the board from the broad standpoint of the alleviation of conditions which necessitate correctional institutions, and the direction of the institutions to their proper end; a man of business training who has definite connections, official if possible, with the purchasing of supplies for all state institutions; and finally the governor, or his direct representative from the board of public affairs, who shall keep the board of control in touch with the constructive movements going on in the state and who shall aid in the coördination of the state functions. The board should be given funds and powers to attach to itself the accountants, inspectors, and clerks necessary to meet the ever-growing functions which it will be required to perform. To it should be given broad powers over the capital funds, and the board, not the warden, should be bonded for the proper management of that fund. The board should report to the legislature, and its members should be appointed by the governor with the consent of the senate for five years, no more than two of the appointed members to be confirmed at the same session of the legislature. A valuable interlocking of official positions would be possible. The educator might be appointed, not only to this board, but to the industrial education commission, and the legislature might establish the position of state purchasing agent, the appointee to which position would serve as the business expert of the board of control.

RAW MATERIAL

Until the introduction of the centralized system of purchase under the board of control, materials used in manufacture at the prison were purchased locally by the prison commissioner and the prison warden. Such a practise is never free from embarrassment, whether it be that of political partiality or

simply rivalry between dealers with the attendant charges of favoritism. These embarrassments the early commissioners and wardens had to contend with. The difficulties attendant upon the purchase of wood—the material most extensively used—have recently been discussed in the reports of a special prison investigation in New York state.[1] Under these circumstances, it is little wonder that the piece-price and contract system found their way into the institutions, the raw material being supplied by those who eventually disposed of the goods.

With the installation of the binder-twine industry, difficulties in the purchase of the raw materials have again presented themselves. Thus far they have been met by the clever purchasing ability of the chairman of the state board of control and the superintendent of the factory, who took advantage of the market conditions in the year 1912 to purchase such materials in South America. According to Warden Wolfer of the Stillwater Prison in Minnesota, where the only successful state binder-twine plant is operated,[2] success in the manufacture of binder twine depends upon the purchase of the raw material, which is always a matter of pure speculation.[3] Speculation by the prison authorities in a falling market in chairs in 1875 forced the prison industries into bankruptcy. To avoid the dangers incident to binder-twine speculation an attempt has been made to grow the raw material on the farm at Waupun, but the success of the enterprise will depend upon the ability to make twine from this material. There is grave doubt of the value of this home-grown product, even as a mixture. The attempt, however, to secure raw material from the state's own property is a step in the right direction. The dangers incident to the fluctuations of the market and the inevitable element of human failure are thus avoided; for even the most conscientious officials, engaged in speculating in an uncertain market always dominated by a strong commercial interest, must sooner

[1] *Report of Special Commission to Investigate the Department of State Prisons*, 1911.

[2] *Report of Bureau of Labor and Industrial Statistics, Wis.*, 1909, p. 168.

[3] *Ib.*, 202.

or later encounter a failure. The binder-twine enterprise has already been launched and must be carried through until it can be discontinued without loss. But the state should not wait until an off season or an unsuccessful purchase of materials forces a shutdown in the plant (as has happened in many states) before providing a system free from the inherent difficulties of the present one.

The state at present owns extensive woodlands in the northern regions. It is also endeavoring to sell a large number of stump lands. In the stumps removed from the land is a source of raw material for manufacturing purposes,[1] while the increase in value by clearance of the land would more than compensate for their removal. The state forests must be cared for and certain timber removed; increased value again will compensate for the wood loss, while the roads built to carry the stumps and trees to the railroad will give additional value to the state lands. Material for wood-working and for pulp could thus be got from the state's own possessions to the state's advantage yet without cost to the prison department. This material would be delivered to the permanent prison camp, situated on a railroad, where a saw-mill and a pulp-mill would be located. The mills would supply both the camp and the prison at Waupun with raw materials similar to the kind which in former years were successfully used. The cost of transportation between the two prisons would be the only large item of expense beyond the labor of the prisoners. Finally the consumption by the state of the paper would make possible the return of the used paper to the prison to be used again as pulp, a permanent supply of raw material thus being created.

The reformatory at Green Bay, in its development of small workshops for supplying state needs, will require raw materials to carry on the work. This material at present is supplied partly by the board of control and partly by a prison contractor. In the broader development of the board of control to include a state purchasing agent, the material can be supplied directly through the agent with the institution simply doing the work

[1] Duncan, R. K., *The Chemistry of Commerce.*

thereon. The advantageous features of the present system would thus be continued, with the gain to the state of the profits which under the present system are diverted to private pockets.

LABOR

The population of the prison at Waupun on the first day of January, 1913, was 708 convicts. Of these, one hundred can be employed profitably in the manufacture of binder twine or of paper. Four hundred men are at present under contract with the Paramount Knitting Company at 65 cents per day. Although the contract itself does not expire until January 15, 1914, yet three hundred men can be withdrawn on three months' notice; upon six months' notice the board of control is empowered by the law to terminate the contract. The superintendent of the binder-twine plant has figured that the convicts employed are worth from $1 to $1.50 per day, and has noted the increased efficiency and the satisfaction of the men at employment by the state rather than by the contractors. For the small wood-working plant which has been established temporarily in the binder-twine plant, the same figures hold. In the forests and on the roads the value of the labor varies from $1.50 to $2 per day in the various parts of the state. The experience of those using convict labor in this way shows it to be equal in value to free labor, providing the physical defects of the convicts are carefully regarded, and sufficient incentive is given the men through the honor system and other educational features. These features have been introduced in the immigrant labor camps in many parts of the country.

Under a management imbued with ideas that have been proved psychologically correct, whereby men are trusted and put on their honor, there is no reason why at least sixty per cent of the population of Waupun cannot be trusted in a limited degree. An honor system would be sufficient to retain these men with few guards in the wood-camp prison suggested, while thirty per cent, or half this number, could be trusted further and sent off into the forests and stump lands. If Colorado and Oregon can do this successfully with sixty per cent of

their prisoners, direct from the prison itself, surely Wisconsin can do it with an intermediate camp colony. In the winter the men could be kept busy with stone crushing and mixing work, together with wood-work. New recruits would be retained at Waupun engaged in maintenance work until the spring. The permanent camp should be equipped for lectures and class drills and should have a library supervised by the state library commission. The commission should also have supervision of the libraries at Waupun and Green Bay. In the winter the permanent camp should assume much of the attitude of the camp work schools for boys and young men which have been established in Indiana and elsewhere.

Labor efficiency would be secured by incentives such as time reduction for good behavior, and a system of money credits for the value of the labor performed. It would be increased by every humane incentive, by the correction of physical ailment, by education, and by the general stimulus of competition between groups. The actual expense of the maintenance and guarding of each man should be charged against him. This system is at present in use at the reformatory. In addition, it should be further modified by statute, so that the earnings credited to the prisoner may be drawn upon in case of need by those dependent upon him.

EQUIPMENT

The permanent equipment of the institutions for manufacturing purposes has suffered from the lack of capital and foresight in purchase—a natural outcome of the decentralized management during the institutions' early development. In the early days hand tools were all that the wood-working shops required. The maintenance shops for cobbling, tailoring, and laundry work required no machines, and while machinery was introduced by the contractors, first in the boot industry and then in the knitting and shirt industries, no equipment was thus added to the state's possession. The building operations required special equipment but this was disposed of after the completion of the buildings. Even today, with the institutions under the board of control, some of the construction work at

Waupun is let out to building contractors on the excuse that there are not enough tools to equip the prisoners, although the completion of the buildings at Green Bay released equipment and made it available for just such work. Coöperative ownership of such equipment under the board of control would save expense and increase the opportunities for construction work.

The appropriations for binder-twine manufacture contemplated and resulted in the purchase and installation of a large quantity of valuable machinery in a building perfectly appointed and erected for a definite purpose. This outlay in binder-twine machinery can always be turned into ready capital by its sale or exchange for other machinery to be used for a different purpose. The equipped shops will employ from one hundred to one hundred and fifty men, leaving the others to be employed either by contractors or by the state. The larger the element of hand labor, the less the cost of equipment. Work in the forests, on the stump lands, and on the roads, requires the minimum of equipment. The cost of the few tools would be small, as would be the cost of erection of the wood-camp with its saw-mill, crusher, and pulp machines. Less than half the unused appropriation of 1887 would probably cover all.

The introduction of wood-working machines into the prison at Waupun would be only the outgrowth of the small shop already established. The cellar of the binder-twine building has been so constructed that it can readily be adapted as a foundry incident to the needs of furniture manufacture. The shops at present used by the contracting firm, while ill-suited to their present use, could be made available without much difficulty or much cost. The balance of the fund of 1887 would equip these shops sufficiently for the beginning of a new industry. The rotating capital fund, broadened in its application to the general state industries, would supply the other needs.

At the reformatory at Green Bay the ingenuity of the superintendent has already developed a number of small shops moderately equipped—with tools institution-made. These shops, which were first needed for construction work, are now being fitted for the manufacture of commodities for state needs. Each addition to these shops will increase the value of the plant

to the state. The use of the credit of the capital fund and better enforcement of the state market regulation would admit of the more rapid development of these shops, and the elimination of the piece-price shirt contract and the machinery owned by the contractors.

MANUFACTURE

The actual production of goods in a factory, or the accomplishment of work on a highroad, or in a forest or stump clearing, depends not only upon capital, management, labor force, and equipment, but upon the supervision of the business detail by those immediately in charge. Competent foremen must be secured, and sufficient remuneration given them to secure them permanently in the work. They must establish the work on that basis of efficiency which constitutes definite discipline for both labor and supervising force.

The conditions of labor, both indoors and out, must be made similar to those under which free labor is worked. In the contract shops guards sit in lofty idleness, watching the hard-working foreman and convicts, always contrasting the dignity of idleness with the dignity of labor. The working guard with the road gang, or in the woods, develops a spirit that gets the work accomplished, while the guard perched on the fence with a gun on his shoulder proves a veritable scarecrow to drive efficiency away. It is to the credit of the new binder-twine foreman at Waupun that he is developing that plant without idle guards and with foremen who work. The elimination of this waste inherent in the contract system will therefore add to the state's profit. Scientific management should be introduced both in the state shops and in the road gangs, while a system of checking of the goods, of blocking out the work and holding the individual responsible for it, as well as giving definite reward for work well done, is necessary. The system of efficiency checks, established by the board of public affairs for the road department of the state, need only be applied to the convict camps, to Waupun and Green Bay.

SELLING

The selling of prison products has been a matter of no little difficulty. The principle was established in the year 1863 that the state superintendent of public property should act as agent for the state departments in buying the goods manufactured in the prison, although the articles manufactured and purchased were limited to certain wooden articles and furnishings. In 1867 all institutions were instructed to buy these articles and a large number of other articles which might be manufactured. In 1875 they were required to secure these things from the prison. This law is still in force (under statute 1898 s. 608), and applies to all state institutions and others getting state money, requiring them to notify the prison of their needs. The difficulty with these statutes lies in the fact that there is no one to compel their being fully carried out. The commissioner or the warden gets orders again and again under these provisions, but as has been seen, the goods were frequently not paid for by the the departments which ordered them. The board of control has become the natural sales agent between the several institutions under its supervision, though the idea of exchange of commodities has been lost sight of at times because of the makeup of the board. As an example, the board at one time refused to buy chairs which were to be used in the insane hospital directly from the Milwaukee workhouse, only to buy the same chairs later after they had passed through the wholesale house and added the middleman's profit.

The cost of selling is probably the largest item in the binder-twine industry. This responsibility now confronts the board of control. The sale of paper to the state would be without this expense. The output of a small unit paper plant would conform with the annual amount purchased by the state. The paper at present used by the state of Wisconsin is manufactured outside the state, and the middleman's profit alone, according to his own testimony, amounts to $17,000 annually. While the constitution provides that bids must be placed for this paper, the warden of the penitentiary or the chairman of the board of control, who surely cannot be said to be making personal profit

from such bidding, should outbid all others and sell the paper to the state.

The law requires that the prison be notified by all state institutions receiving state moneys as to their needs. This presents another opportunity for the direct sale of commodities by the penal institutions, without resorting to the middleman or sales agent. The confusion in administration has limited this field, as has been shown above. Under this head comes the sale of goods to institutions and departments which the reformatory at Green Bay will soon be able to supply.

The market in school-desks and other school furnishings, furniture for the departments and state institutions and the general wood-work for the same, can be secured only by gradual working up through the board of control or the proposed sales agent, but its extent can be ascertained from the following: The public school enrolment of the state amounts to 460,000 children, while the forty new high schools add still more to the number. It is impossible to ascertain the annual purchase of desks, but their average life is less than twenty years and there is at present a definite need for new equipment. It would be safe to estimate the annual demand at 50,000 desks. These desks cost from $1.75 to $2.25, making an average of $2 a desk or $100,000 as the annual investment in desks. There are 25,000 teachers whose desks average ten years of use, making an annual need of 2500 pieces of the better grade of school furniture. To these must be added the high-school equipment in sloyd benches, general benches and physics tables, also some ten thousand little chairs for kindergartens, sashes and doors for new school houses, and gymnasium equipment, such as Indian clubs. During the year 1911–12 the university purchased furniture to the amount of $16,766. To this must be added the purchases by the board of control, the superintendent of public buildings and other officials.

The failure to enforce the present statutes and to coördinate the various departments is due to the lack of a state purchasing agent, who should be a member of the board of control. Such an office should be created if possible in connection with the board of public affairs, and given powers adequate for the

carrying-out of the broad coördination necessary if the state government is to perform its functions in an efficient manner.

ADAPTATION TO WISCONSIN OF GERMAN IDEAS

The recommendations already noted naturally grew out of the present conditions and the present needs of the prison workshops and of the opportunities which are at hand in the state. Novelty is not claimed for any of the suggestions. The idea of prison production for state consumption has been embodied in the Wisconsin law from the very outset and is similar to the principle that has been followed in Germany since 1877.[1] At that time the Prussian Ministry of the Interior, under Chancellor Krohne, acting on the recommendations of the German chamber of commerce, which had made a detailed investigation into the subject, adopted the principle and applied it gradually to the furnishing of supplies to the district authorities, to the army, the navy, the postal department, the railroad and the courts. In 1894 New York state, under the leadership of Elihu Root, embodied the same principle in its constitution. Ohio in 1911 adopted it in a bill recommended by Governor Harmon, only to place it in its constitution in 1912. The legislature of New Jersey on the recommendation of Woodrow Wilson passed a similar statute, while Missouri under Governor Hadley, Wyoming under Governor Carey, and California under Governor Johnson also have adopted the principle. This is a German idea being adapted to American conditions. More recent developments in Germany have extended the idea of state use to the employment of convicts on public works and ways, in the development of canals, in the reclaiming of marsh, in reforestation, and in the larger phases of agriculture.

France has successfully employed convicts in reforestation for many years, and a recent visit of Governor Dix of New York to these reforestation camps resulted in their establishment in New York state. Governor Johnson of California also conducted them successfully during 1912.

[1] *Die Gefängnisarbeit, Vortrag gehalten am 26 Juli, 1900, von Dr. Franz V. Liszt, ord. Professor des Rechts in der Universität Berlin.*

In many states convicts are employed on the roads and in crushing stone, while in Wisconsin and several others the farm project is already recognized. The manufacture of school desks and furniture for the state has been authorized by the Wisconsin legislature since 1867, while furniture of some kind has been manufactured at Waupun during about half the years of its existence. The introduction of printing is already an accomplished fact in the reform school at Waukesha, in the prisons of New York, and in the prisons of a number of other states. It is here suggested that printing be introduced at Waupun for life-termers only. This would be desirable, as they would become trained workers and yet would not be discharged to compete with other workers in this trade. The manufacture of paper is a new idea in this country, but it is one that has been successful at the workhouse at Brauweiler in Germany.

RECOMMENDATIONS

1. That a bill be passed by the legislature reorganizing the board of control so that it may be a board of experts representing the several phases of its activity, with a state sales agent attached thereto, together with a force of clerks and inspectors sufficient to conduct the work of the board, and with sufficient appropriations to pay adequate salaries.

2. That the board of control and the officers of the state departments see to the enforcement of statute 1898, s. 608, which provides for the manufacture and exchange of commodities between the prison and penitentiary and the other departments, institutions and districts. To the reformatory at Green Bay the board should assign the manufacture of all articles except those of wood, which should be retained for manufacture at the state prison at Waupun.

3. That a stone-quarry site be selected upon the state land in the northern part of the state, abutting upon a railroad, where a permanent camp could be constructed, equipped with machines for crushing rock, and with a pulp factory for the preparation of wood products. The camp, once constructed, should be connected by roads with the state timber lands and the state stump lands. All prisoners who can be placed on

their honor should be sent to this camp, where a second selection of those still more trustworthy should be made. This latter group should be used to clear the stump lands, and to do reforestation work in the state forest lands. The stumps and the wood cleared from the lands should be brought down to the pulp factory, and the crushed stone taken back for the further extension of the roads.

The pulp and the boards from the wood-camp should be shipped to Waupun, where there should be established a school-desk and state furniture factory, a paper mill, and a printing shop. In the printing shop life-prisoners should be used. The products of this plant should be delivered to the several parts and departments of the state; the warden of the prison should place a bid for the state printing, excepting the legislative, and should secure the same according to the rules laid down by the constitution. Waste paper gathered from the departments of the state should be returned to the prison and used again as pulp.

4. That a law be passed authorizing the payment to the convict of a wage based on his productivity, which should be increased by the most scientific medical care and the correction of physical defects, together with such regulations for education in prison and road-camp as shall prove an incentive to better living and better work. The actual expenses of the maintenance and guarding of the convict should be charged against him and deducted from the allowance credited to him on the basis of the free man's work. By law, the balance should go to his wife, children and other dependents.

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CONSTITUTION AND BY-LAWS

CONSTITUTION

Article I—*Name*

The name of this association shall be "The Academy of Political Science in the City of New York."

Article II—*Objects*

The objects of the Academy are the cultivation of the political sciences and their application to the solution of social and political problems. These objects shall be prosecuted in such manner as the Board of Trustees shall from time to time direct, either by the encouragement of research, the holding of public meetings or lecture courses, the establishment of a library, or in any other way the Board may approve.

Article III—*Headquarters*

The headquarters of the Academy shall be in the City of New York, and the Academy shall be affiliated with Columbia University in such manner as the Board of Trustees may be able to arrange with the Trustees of Columbia University.

Article IV—*Membership and Dues*

The Board of Trustees shall prescribe the qualifications of members, and establish such classes of membership, whether life, active, associate or otherwise, as it may deem wise, define the privileges of members and fix the amount of the annual dues or life-membership fees to be paid by the members.

Article V—*Government*

The management of all the affairs of the Academy and the trusteeship of all its property are vested in a Board of Trustees composed of nine directors elected by the members of the Academy, and the officers elected by the Board of Directors. Three directors shall be chosen at the annual meeting each year for a term of three years each.

At the annual meeting at which this constitution is adopted nine directors shall be elected, and those persons so chosen shall at their first meeting, to be called within one week from the date of the annual meeting by the secretary of that meeting, cast lots so that the terms of service of three directors shall expire at the next annual meeting, three at the second, and three at the third annual meeting from the one at which the nine directors were chosen.

The directors and the officers together constitute the Board of Trustees and any five of them shall constitute a quorum. The Board shall meet at the call of the President of the Academy, who shall be *ex officio* the Chairman of the Board. At any time at the written request of three members of the Board the President shall call a meeting.

In the event of the death or resignation of a director, the Board shall fill the vacancy until the next annual business meeting of the members when the members shall elect a person to fill the unexpired term.

Article VI—*Officers*

The officers of the Academy shall be a President, two Vice-Presidents, a Secretary and a Treasurer, who shall be elected annually by the directors at the first meeting of the Board subsequent to the annual business meeting of the Academy. They shall be elected for a term of one year and shall serve until their successors are chosen and shall perform the duties usually pertaining to their respective offices and such as may be prescribed by the Board of Trustees.

Article VII—*Meetings*

The meetings of the Academy shall be held at such times and places and for such purposes as the Board of Trustees may direct, except that at least once a year in the month of December or January the Board shall fix a date for the annual business meeting for the election of directors and the presentation of reports on the work of the Academy from its officers or from the Board of Trustees, or both, and notice of such meeting shall be mailed to all members at least ten days prior to the date so fixed. Such members as are present shall constitute a quorum.

Article VIII—*Advisory Council*

The Board of Trustees may elect an Advisory Council to be composed of men distinguished for public service, whether members of the Academy or not, provided they are interested in its work and willing to give counsel in the formulation and execution of its policies.

Article IX—*By-Laws and Amendments*

The Board of Trustees shall have power to adopt by-laws not inconsistent with this constitution for the better transaction of its business, and amend the same at pleasure and this constitution may be amended by a majority vote at any annual business meeting or at any regularly called special business meeting of the members of the Academy provided notice of such meeting has been mailed to all members at least ten days prior to the date of meeting, and provided further, that all amendments shall have the approval of a majority of the Board of Trustees, or otherwise must be considered at two consecutive business meetings of the members of the Academy before they can be put to vote.

BY-LAWS

1. The Board of Trustees shall meet at the call of the President, and five members shall constitute a quorum. On written request of three members of the Board the President shall call a meeting of the Board.

2. Any person interested in the work of the Academy and signifying a desire to promote its objects shall, upon application to the Secretary and upon payment of dues for the ensuing year, be enrolled as a member.

3. Members of the Academy shall pay annual dues in the amount of five dollars, payable in advance. Said payment shall date from the first day of the quarter (January—March, April—June, July—September, October—December) in which such members were enrolled, except that the membership of persons enrolled in March, June, September and December shall date for the payment of dues from the first day of the following month.

4. Any member may compound his annual dues by the single payment of one hundred dollars and thereby be enrolled as a

Life Member and be exempt from further payment of annual dues.

5. The President shall have executive control of the business offices of the Academy. He shall appoint an "Assistant to the President" subject to the approval of the Board and at a salary to be fixed by the Board, and shall prescribe the duties of that officer.

6. The President shall approve all bills incurred for the Academy and transmit them for payment to the office of the Treasurer, together with a copy of, or reference to, the resolution of the Board under which the expense was incurred, except that incidental office expenses in an amount not to exceed one hundred dollars ($100) a month, and bills for temporary service in the offices of the Academy, or for purposes (services, material, traveling expenses, *etc.*) connected with the regular routine business of the Academy, or the work of any of its committees, in amounts not exceeding one hundred dollars ($100) may be paid by the Treasurer upon the approval of the President without special resolution of the Board, provided, however, all such payments be reported to and approved by the Board at its next meeting.

7. These by-laws may be amended at any meeting of the Board of Trustees by a majority vote, provided at least eight members of the Board vote in favor of such amendment or subsequently record in writing their consent thereto.

OFFICERS OF THE ACADEMY

HONORARY MEMBER

Bryce, The Right Honourable Viscount James
Camden Hill Square, London

LIFE MEMBERS

Bacon, Robert L.	14 Wall Street
Brackenridge, George W.	San Antonio Natl. Bank, San Antonio, Texas
Carnegie, Andrew	2 East 91st Street
Chamberlain, Joseph P.	Columbia University
Clark, Stephen C.	149 Broadway
deForest, R. W.	30 Broad Street
Dryden, Forrest F.	Prudential Insurance Co., Newark, N. J.
Dunham, Edward K.	35 East 68th Street
Eidlitz, Otto M.	489 Fifth Avenue
Elkus, Abram I.	170 Broadway
Fish, Stuyvesant	52 Wall Street
Frankland, Frederick Wm.	"Okataine", Foxton, Manawatu, New Zealand
Goodnow, Frank J.	Johns Hopkins University, Baltimore, Md.
Griffin, Frederick R.	Sherbrooke and Simpson Sts., Montreal, Canada
Guthrie, William D.	28 Park Avenue
Halsey, Frederic R.	22 West 53d Street
Hammond, John Hays	71 Broadway
Hewitt, Herbert H.	111 Broadway
Huntington, Archer M.	1083 Fifth Avenue
Hyams, Godfrey M.	P. O. Box 5104, Boston, Mass.
Iles, George	Park Avenue Hotel
Kahn, Otto H.	52 William Street
Lamont, Thomas W.	23 Wall Street
Leeds, Mrs. Warner Mifflin	11 East 65th Street
Lewisohn, Adolph	42 Broadway
Lindsay, Samuel McCune	Columbia University
Macy, V. Everit	68 Broad Street
Marshall, Louis	47 East 72d Street
Mitchell, Wesley C.	Columbia University
Morgenthau, Henry	165 Broadway
Morris, Newbold	115 East 73d Street
Pinchot, Amos R. E.	60 Broadway
Plimpton, George A.	70 Fifth Avenue
Powell, Thomas Reed	Columbia University
Quesada, Ernesto	Libertad 946, Buenos Aires, R. A.
Riker, John J.	19 Cedar Street

Seager, Henry R.	Columbia University
Seligman, Edwin R. A.	Columbia University
Shaw, Albert	30 Irving Place
Smith, S. L.	1013 Woodland Avenue, Detroit, Mich.
Vail, Theodore N.	26 Cortlandt Street
Warburg, Felix M.	52 William Street
Warburg, Paul M.	52 William Street
Williams, John Skelton	801 East Main Street, Richmond, Va.
Woerishoffer, Mrs. Anna	IV Bramsplatz 6, Vienna, Austria

* MEMBERS

Abbott, E. G.	14 Deering Street, Portland, Me.
Abbott, Edwin M.	700 Land Title Bldg., Philadelphia, Pa.
Abbott, Lyman	287 Fourth Avenue
Acheson, Edward G.	Niagara Falls, N. Y.
Ackerman, Ernest R.	506 West 8th Street, Plainfield, N. J.
Ackerman, William	2218 Eighth Avenue
Adams, A. E.	5th Avenue & Broadway, Youngstown, O.
Adams, Edward D.	71 Broadway
Adams, Henry Sherman	152 Montague Street, Brooklyn, N. Y.
Adams, Samuel B.	Savannah, Ga.
Adkins, Jesse C.	Chevy Chase, Md.
Adriance, Benjamin	254 Van Brunt Street, Brooklyn, N. Y.
Agar, John G.	31 Nassau Street
Albert, S.	112 Lenox Avenue
Aldrich, Nelson W.	Warwick, Providence, R. I.
Alexander, Mrs. A.	Castle Point, Hoboken, N. J.
Alexander, Joseph E.	Winston-Salem, N. C.
Alexander, J. S.	31 Nassau Street
Alexander, William H.	80 Maiden Lane
Allen, Ethan	126 Fifth Avenue
Allen, Frederick H.	63 Wall Street
Allen, Frederick L.	55 Cedar Street
Allen, George W. H.	Box 538, Cazenovia-on-Lake Owahgena, N. Y.
Allen, Mrs. George W.	Box 188, Bayden, Cazenovia, N. Y.
Allen, Stephen H.	501 Jackson Street, Topeka, Kansas
Allen, William H.	385 Central Park West
Alling, Joseph T.	Rochester, N. Y.
Alling, Newton D.	National Nassau Bank
Altschul, C.	10 Wall Street
Altschul, Richard	Anglo London & Paris Natl. Bank, San Francisco, Calif.
Alvord, Andrew P.	12 West 44th Street
Alvord, Dean	111 Broadway
Anderson, A. A.	80 West 40th Street

* In addresses giving street and number only, the city is New York.

Anderson, Charles W.	156 West 132d Street
Anderson, Frank B.	Care of the Bank of California, San Francisco, Calif.
Anderson, John	81 Maiden Lane
Anderson, Mrs. J. Scott	Torresdale House, Torresdale, Philadelphia, Pa.
Anderson, Thomas T.	4241 Folsom Avenue, St. Louis, Mo.
Andrew, Mrs. Harriet Fisher	Box 23, Trenton, N. J.
Andrews, A. C.	83 Cedar Street
Andrews, Arthur Irving	Tufts College, Mass.
Andrews, Constant A.	1 Maple Avenue, White Plains, N. Y.
Andrews, W. H.	130 East 67th Street
Apple, Harry E.	37 West 36th Street
Archbold, John D.	26 Broadway
Archer, Mrs. G. C.	11 West 91st Street
Arend, Francis J.	165 Broadway
Arents, George, jr.	111 Fifth Avenue
Armstrong, Dwight M.	1150 Eastmoreland Avenue, Memphis, Tenn.
Armstrong, Russell	60 Broadway
Armstrong, S. T.	Katonah, N. Y.
Arnold, Carrington G.	30 Broad Street
Arnold, Joseph A.	22 William Street
Arnold, Lynn J.	22 Beaver Street, Albany, N. Y.
Arnstein, Leo	City Hall
Arvine, E. P.	42 Church Street, New Haven, Conn.
Aspegren, John	New York Produce Exchange
Astor, Vincent	23 West 26th Street
Astruck, J. Harry	7-9 West 18th Street
Atkins, George W. E.	195 Broadway
Atkinson, Franklin Pierce	Great Falls, Mont.
Atwater, Richard M., jr.	25 Broad Street
Atwood, Kimball C.	290 Broadway
Atwood, Kimball C., jr.	290 Broadway
Auchincloss, Gordon	68 East 86th Street
Auchincloss, James C.	60 Broadway
Auerbach, Joseph S.	34 Nassau Street
Auerbach, Louis	842 Broadway
Austin, Charles	23 West Street, Battle Creek, Mich.
Avery, Samuel P.	61 Woodland Avenue, Hartford, Conn.
Babbott, Frank L.	346 Broadway
Babcock, H. D.	20 East 52d Street
Bachia, Richard A.	47 West 16th Street
Backenstoe, J. M.	500 Chestnut Street, Emaus, Pa.
Bacon, Edward R.	2 Wall Street
Bacon, Mrs. Francis McN., jr.	135 East 39th Street
Bacon, George Wood	115 Broadway
* Bacon, Robert L.	14 Wall Street
Baettenhaussen, Theodore	542 Fifth Avenue
Bailey, Charles L.	Harrisburg, Pa.

* Life Member

Bailey, Frank	175 Remsen Street, Brooklyn, N. Y.
Baillieu, C. L.	Heathfield, Toorak, Melbourne, Australia
Baird, F. C.	224 Frick Building, Pittsburgh, Pa.
Baker, A. G.	Care of G. & C. Merriam Co., Springfield, Mass.
Baker, Alfred L.	141 South LaSalle Street, Chicago, Ill.
Baker, Charles Adkins	52 Broadway
Baker, George F., jr.	2 Wall Street
Baldwin, Frank V.	170 Prospect Place, Brooklyn, N. Y.
Baldwin, William D.	175 West 58th Street
Baldwin, William H.	1415 Twenty-first Street, Washington, D. C.
Bandler, S. W.	134 West 87th Street
Barber, James T.	Eau Claire, Wis.
Barber, Major William	52 Beaver Street
Barbour, Edmund D.	610 Sears Building, Boston, Mass.
Barclay, R. G.	5 East 78th Street
Baring, Charles	97 East 58th Street
Barlow, Peter T.	Board of City Magistrates
Barnes, Edward W.	70 Worth Street
Barnes, George M.	Commercial National Bank, Syracuse, N. Y.
Barnum, William M.	62 Cedar Street
Barron, Charles S.	1119 Pickins Street, Columbia, S. C.
Barry, Charles D.	17 State Street
Barstow, George Eames	Barstow, Texas
Barthèlèmy, Louis C. J.	10 Wall Street
Bartlett, J. Kemp	2100 Mt. Royal Terrace, Baltimore, Md.
Bartlett, Philip G.	62 Cedar Street
Baruch, Bernard M.	111 Broadway
Baruch, Emanuel de M.	57 East 77th Street
Bassett, Acton Civill	165 Broadway
Bates, Mrs. Lindon W.	784 Fifth Avenue
Battelle, John Gordon	Columbus, O.
Batten, George	93 Union Street, Montclair, N. J.
Battle, George Gordon	37 Wall Street
Baumann, F. W.	6-9 Hanover Street
Bayley, George W.	442 Jamaica Avenue, Brooklyn, N. Y.
Bayne, Howard	135 Broadway
Beaman, George Herbert	2232 Massachusetts Avenue, Washington, D. C.
Beard, Curtis J.	41 West 34th Street
Beardsley, Samuel A.	54 Wall Street
Bechhoefer, Charles	847 Ashland Avenue, St. Paul, Minn.
Bechtel, George M.	Davenport, Ia.
Beckwith, Holmes	3008 Benvenue Avenue, Berkeley, Calif.
Bedell, Louis	111Broadway
Beekman, Charles K.	52 William Street
Beekman, Gerard	35 East 38th Street
Beer, G. L.	329 West 71st Street
Beer, Ludwig	Milchinsel, Leipzig, Germany
Bell, Frederick D.	39 West 38th Street
Bell, James J.	Shenandoah, Pa.

Beller, William F.	51 East 123d Street
Belmont, August	23 Nassau Street
Belmont, Mrs. O. H. P.	477 Madison Avenue
Beman, Lamar T.	East High School, Cleveland, O.
Bend, Miss Beatrice	563 Park Avenue
Bendix, Ludwig	5 Nassau Street
Benedict, L. C.	7 Wall Street
Benjamin, Eugene S.	440 Lafayette Street
Benjamin, G. G.	University of Pittsburgh, Pittsburgh, Pa.
Benjamin, M. W.	43 West 88th Street
Bensel, J. A.	Albany, N. Y.
Benton, A.	79 Wall Street
Beran, Theodore	50 Central Park West
Bernard, G. H.	Glasco, Kansas
Bernheim, Isaac W.	Louisville, Ky.
Bernheimer, Charles S.	Pitkin Avenue & Watkins Street, Brooklyn, N. Y.
Bertram, H. Henry	116 West 14th Street
Bertschmann, J.	P. O. Box 418
Berwind, Edward J.	1 Broadway
Best, Harry	14 Livingston Place
Bettman, Alfred	1514 First National Bank Building, Cincinnati, O.
Betts, Charles H.	29 Holly Street, Lyons, N. Y.
Betts, Robert M.	Cornucopia, Ore.
Bevin, W. D.	109 Leonard Street
Bhandarkar, V. G.	RacecourseRoad, Baroda, India
Bickford, Herbert J.	100 St. Marks Place, New Brighton, S. I.
Bidstrup, J. F.	42 Jerome Street, Brooklyn, N. Y.
Biggs, Albert W.	Tennessee Trust Building, Memphis, Tenn.
Biggs, Charles	13 Astor Place
Bijur, Nathan	160 West 75th Street
Bilgram, Hugo	1235 Spring Garden Street, Philadelphia, Pa.
Billquist, C. Edward	11 Broadway
Bing, Alexander M.	505 Fifth Avenue
Bishop, James C.	33 Pine Street
Bishop, Samuel H.	500 West 122d Street
Bixby, W. H.	735 Southern Building, Washington, D. C.
Black, Mrs. Elmer E.	512 Fifth Avenue
Black, Hugh	109 Lorraine Avenue, Upper Montclair, N. J.
Black, William H.	18 East 28th Street
Blades, J. B.	New Bern, N. C.
Blagden, Arthur C.	176 East 70th Street
Blair, Mrs. C. Ledyard	Peapack, N. J.
Blake, Edwin M.	Room 1406, 1 Liberty Street
Blake, Maurice C.	Magdalen College, Oxford, England
Blakeley, William A.	1237 Oliver Building, Pittsburgh, Pa.
Blanchard, Irwin T.	Woodland, N. C.
Bliss, C. N., jr.	117 Duane Street
Bliss, William H.	6 East 65th Street
Bloch, Adolph	911 Park Avenue

Blount, Henry F.	"The Oaks", Washington, D. C.
Blount, Walter E.	Bluemont, Va.
Blum, Charles	Jacksonville, Fla.
Blum, Edward C.	424 Fulton Street, Brooklyn, N. Y.
Blumenthal, Mrs. George	23 West 53d Street
Blumenthal, Hugo	5 Nassau Street
Blumenthal, Sidney	305 West 90th Street
Bodine, Samuel T.	Broad & Arch Streets, Philadelphia, Pa.
Bogat, P.	714 St. Nicholas Avenue
Bollinger, James Wills	524 Locust Street, Davenport, Ia.
Bolster, Wilfred	Court House, Boston, Mass.
Bomar, Horace L.	Spartanburg, S. C.
Bond, James A. C.	Westminster, Md.
Bondy, Joseph	910 Irving Avenue, Syracuse, N. Y.
Bonn, M. J.	Gaussstrasse, Munich, Germany
Bontecou, Frederic T.	150 Highland Avenue, Orange, N. J.
Booraem, Alfred W.	204 Lincoln Place, Brooklyn, N. Y.
Borah, William E.	United States Senate, Washington, D. C.
Borchard, Edwin M.	Library of Congress, Washington, D. C.
Borchard, Paul	42 Amsterdam Avenue
Bordwell, Percy	602 N. Dubuque Street, Iowa City, Ia.
Borg, Sidney C.	20 Nassau Street
Borges, Esteban Gil	Caracas, Venezuela, S. A.
Boudin, L. B.	302 Broadway
Boudinot, George S.	30 Church Street
Bourne, Frederick G.	149 Broadway
Bouvier, John Vernon, jr.	141 Broadway
Bowman, D. Arthur	Third National Bank Building, St. Louis, Mo.
Bowman, Harold M.	32 Nassau Street
* Brackenridge, George W.	San Antonio Natl. Bank, San Antonio, Tex.
Bradbury, Harry B.	141 Broadway
Bradley, Robert S.	92 State Street, Boston, Mass.
Brady, James B.	7 West 86th Street
Brady, Nicholas F.	54 Wall Street
Braley, Henry K.	151 Kilsyth Road, Brighton, Mass.
Braman, Chester A.	70 Worth Street
Brandow, Morris	488 Peachtree Street, Atlanta, Ga.
Brannan, Miss Eleanor D.	11 West 12th Street
Braswell, James C.	Rocky Mount, N. C.
Breed, R. E.	30 Church Street
Bremer, Paul G.	1344 Summit Avenue, St. Paul, Minn.
Brennan, John F.	16 South Broadway, Yonkers, N. Y.
Brentano, Simon	225 Fifth Avenue
Brewer, Mrs. M. Dryden	400 Riverside Drive
Brewster, William T.	Columbia University
Brice, W. Kirkpatrick	693 Fifth Avenue
Briesen, Arthur von	25 Broad Street

* Life Member.

Brimmer, George E.	Rawlins, Wyoming
Brinsmade, John C.	The Gunnery School, Washington, Conn.
Bristol, George W.	20 Broad Street
Bristol, John I. D.	45 West 74th Street
Britton, Alexander	1419 F. Street, Washington, D. C.
Brock, Alfred T.	424 California Street, San Francisco, Calif.
Brock, James E.	Mississippi Valley Trust Co., St. Louis, Mo.
Brockett, Orlando Mitchell	1502 West 9th Street, Des Moines, Ia.
Brody, Joseph M.	62 West 92d Street
Bronner, Harry	5 Nassau Street
Bronson, Ira	614 Colman Building, Seattle, Wash.
Brookings, Robert S.	Ellwood Place, St. Louis, Mo.
Broomhall, Allen	31 Nassau Street
Brown, Charles C.	Kenosha, Wis.
Brown, Charles T.	60 Wall Street
Brown, Charles Paul	141 Broadway
Brown, Charles S.	146 Broadway
Brown, Dickson Q.	160 West 59th Street
Brown, Edward W.	28 Beaver Street
Brown, Frank L.	Care of Palmer Union Oil Co., Sisquoc, Santa Barbara, Cal.
Brown, Franklin Q.	33 Pine Street
Brown, Francis Shunk	1421 Chestnut St., Philadelphia, Pa.
Brown, Hugh Henry	State Bank Building, Tonopah, Nevada
Brown, H. J.	Berlin Mills Co., Portland, Me.
Brown, James	789 Park Avenue
Brown, Lowell H.	56 Munn Avenue, East Orange, N. J.
Brown, Philip King	350 Post Road, San Francisco, Calif.
Brown, Seldon S.	Scottsville, N. Y.
Brown, Walston H.	45 Wall Street
Brown, William Adams	114 East 30th Street
Brown, William H.	The Berkeley School, 270 West 72d Street
Browning, J. A.	1 West 72d Street
Bruce, Edward B.	Manila, P. I.
Bruère, Miss Mina M.	55 Wall Street
Brundrett, E. L.	52d Street & Sunset Drive, Kansas City, Mo.
Bryant, Charles E.	495 Broadway
Bryant, W. Sidney, jr.	200 Fifth Avenue
Bryce, The Right Honourable Viscount James	Camden Hill Square, London, England
Buck, Walter H.	1400 Continental Building, Baltimore, Md.
Buckley, William W.	141 Broadway
Buckner, M. N.	26 Broad Street
Bucholz, W. H.	Omaha National Bank, Omaha, Neb.
Budington, Ernest G.	32 Nassau Street
Buenz, K.	135 Central Park West
Buhler, Conrad	260 Fourth Avenue
Bullock, Charles E.	Canton, Pa.
Bullock, George	40 Wall Street
Bullwinkel, Edward J.	42 Broadway
Bunker, Albert	97 Hudson Terrace, Yonkers, N. Y.

Bunker, George R.	421 North Broadway, Yonkers, N. Y.
Bunn, Charles W.	549 Portland Avenue, St. Paul, Minn.
Burbank, A. N.	30 Broad Street
Burchell, Durward E.	149 Broadway
Burden, James A.	Troy, N. Y.
Burdick, F. M.	Columbia University
Burdick, William	602 Continental Building, Baltimore, Md.
Burges, William H.	2 Republic Building, El Paso, Texas
Burgess, John W.	323 West 57th Street
Burke, Thomas	408 Burke Building, Seattle, Wash.
Burns, William J.	811 First National Bank Building, Chicago, Ill.
Burr, A. G.	Rugby, N. D.
Burr, Mrs. Winthrop	7 Wall Street
Bush, Irving T.	100 Broad Street
Bustamante, Antonio S. de	Apartado 134, Havana, Cuba
Butler, Charles Stewart	32 Nassau Street
Butler, Joseph G., jr.	Youngstown, O.
Butler, Nicholas Murray	Columbia University
Butler, William W. S.	Stockton, Calif.
Byard, James J.	Cooperstown, N. Y.
Byrne, James	24 Broad Street
Cahn, Arthur L.	27 Pine Street
Cahn, William L.	111 Broadway
Calder, John	129 Ferry Avenue, East, Detroit, Mich.
Caldwell, R. J.	129 Orange Road, Montclair, N. J.
Calfee, Joseph S.	Mechanics-American National Bank, St. Louis, Mo.
Calhoun, Patrick	30 Broad Street
Calkins, John U.	2347 Prospect Street, Berkeley, Calif.
Cammann, Herman H.	84 William Street
Camp, Frederick A.	Waldo Avenue, Riverdale, N. Y.
Canfield, George F.	49 Wall Street
Cannon, James G.	Fourth National Bank
Capen, Edward Warren	146 Sargeant Street, Hartford, Conn.
Capper, Arthur	1035 Topeka Avenue, Topeka, Kansas
Carlebach, Emil	136 West 86th Street
Carlebach, Walter M.	136 West 86th Street
Carlesmith, Carl S.	Hilo, Hawaii
* Carnegie, Andrew	2 East 91st Street
Carnochan, William E.	52 William Street
Carolan, Edgar A.	640 Madison Avenue
Carrigan, Andrew	140 Kansas Street, San Francisco, Calif.
Carrington, A. B.	200 Broadway
Carter, J. M.	Texarkana, Arkansas
Carter, Jarvis P.	52 William Street
Casady, Simon	Care of Central State Bank, Des Moines, Ia.
Castle, Alfred L.	P. O. Box 349, Honolulu, Hawaii
Chadbourne, Thomas L., jr.	14 Wall Street
Chamberlain, Albert H.	43 Irving Street, Cambridge, Mass.

* Chamberlain, Joseph P.	Columbia University
Chandler, Alfred D.	Brookline, Mass.
Chandler, Percy M.	3d & Walnut Streets, Philadelphia, Pa.
Channing, J. Parke	5 Broadway
Chase, George	309 West 74th Street
Cheney, O. H.	78 Madison Avenue
Chew, Ng Poon	809 Sacramento Street, San Francisco, Calif.
Childs, Edwards H.	59 Wall Street
Childs, R. S.	23 Fifth Avenue
Childs, S. W.	14 Wall Street
Childs, William H.	17 Battery Place
Chisholm, B. Ogden	16 East 53d Street
Choate, Joseph H.	60 Wall Street
Cillis, Hubert	20 Nassau Street
Claflin, John	224 Church Street
Clancy, Frank W.	Santa Fe, New Mexico
Clancy, John R.	1010 West Belden Avenue, Syracuse, N. Y.
Clare, William F.	Suite 916, 135 Broadway
Clark, David T.	Williamstown, Mass.
Clark, Emory W.	1740 Jefferson Avenue, Detroit, Mich.
Clark, Grenville	500 Madison Avenue
Clark, Herbert W.	East Las Vegas, New Mexico
Clark, John Bates	407 West 117th Street
Clark, J. M.	Amherst, Mass.
Clark, LeRoy	114 Liberty Street
Clark, Lyman K.	Ayer, Mass.
Clark, Russell Porter	52 Grove Street, Stamford, Conn.
* Clark, Stephen C.	149 Broadway
Clark, V. V.	444 Henry Building, Seattle, Wash.
Clark, Walter E.	824 St. Nicholas Avenue
Clark, William A.	20 Exchange Place
Clark, W. R.	2717 North Broadway, Los Angeles, Calif.
Clarke, E. A. S.	2 Rector Street
Clarke, Lewis L.	128 Broadway
Clarkson, David A.	659 Fifth Avenue
Cleveland, F. A.	261 Broadway
Cleveland, J. Wray	176 Broadway
Clews, Henry	15 Broad Street
Close, F. N. B.	7 Wall Street
Coffin, C. A.	30 Church Street
Coffin, William	American Consulate, Jerusalem, Palestine
Coffin, W. E.	902 Seventh Street, Des Moines, Ia.
Cogswell, William Browne	Syracuse, N. Y.
Cohen, Arthur J.	45 Wall Street
Cohen, Benno	308 West 94th Street
Cohen, Henry L.	808 West End Avenue
Cohen, Julius Henry	111 Broadway

* Life Member.

Cohen, William N.	22 William Street
Coker, F. W.	The Ohio State University, Columbus, O.
Colby, Howard A.	Plainfield, N. J.
Cole, Charles L.	49 Wall Street
Cole, Edward F.	301 West 106th Street
Colgate, Gilbert	199 Fulton Street
Coleman, C. P.	57th Street & Broadway
Coler, Bird S.	43 Cedar Street
Collier, Barron G.	Flat Iron Building, Broadway & 23d Street
Colt, LeBaron B.	United States Senate, Washington, D. C.
Colvin, D. Leigh	655 West 177th Street
Colvin, George A.	320 Broadway
Conant, Charles A.	34 Nassau Street
Conkey, H. M.	83 Cedar Street
Conklin, Roland R.	1 Wall Street
Connor, H. G.	Bruton and Gray Streets, Wilson, N. C.
Connor, Washington E.	Onteora Club, Tannersville, N. Y.
Conover, Louis W.	54 William Street
Conway, Eustace	127 East 35th Street
Conyngton, Thomas	20 Vesey Street
Cook, Alfred A.	123 West 79th Street
Cook, Mrs. Madge Carr	302 West 77th Street
Cook, Walter W.	University of Chicago Law School, Chicago, Ill.
Cook, William W.	44 Wall Street
Copeland, Charles C.	250 Academy Street, Jersey City, N. J.
Cord, J. F.	Carlotte Hall, Md.
Cordley, F. R.	324 West 103d Street
Corey, William E.	14 Wall Street
Cornell, William H.	34 Nassau Street
Corning, C. R.	36 Wall Street
Corrigan, J. E.	122 East 82d Street
Corwin, Edward S.	115 Prospect Avenue, Princeton, N. J.
Coshow, O. P.	Roseburg, Ore.
Coster, Miss Helen	37 East 37th Street
Cotton, Joseph P., jr.	14 Wall Street
Couden, Elliott R.	Ridgewood National Bank, Brooklyn, N. Y.
Coulter, Elmer Dean	261 West 44th Street
Cowperthwait, J. Howard	2222 Third Avenue
Cox, Raymond B.	20 Nassau Street
Cox, Robert Lynn	1 Madison Avenue
Crain, Thomas C. T.	121 West 75th Street
Cram, Ralph Adams	15 Beacon Street, Boston, Mass.
Crandell, H. L.	The Bank of Long Island, Jamaica, L. I.
Crane, Alexander B.	55 Wall Street
Crane, Charles R.	31 West 12th Street
Cravath, Paul D.	52 William Street
Crawford, Miss Caroline	Middlebury College, Middlebury, Vt.
Crawford, W.	10 West 20th Street
Creel, Enrique C.	3a de Londres, No. 40, Mexico City, Mexico

Crider, George A.	1415 South 58th Street, Philadelphia, Pa.
Croll-Blackburne, Mrs. Ida P.	519 South 41st Street, West Phila., Pa.
Croly, Herbert	Windsor, Vt.
Crook, J. W.	Amherst, Mass.
Crow, Allen B.	357 Ninth Street, Brooklyn, N. Y.
Culbertson, John J.	Paris, Texas
Cumming, Joseph B.	The Hill, Augusta, Ga.
Cummins, Albert B.	United States Senate, Washington, D. C.
Curtis, Bracey	Nogales, Ariz.
Curtis, W. E.	30 Broad Street
Cutcheon, F. W. M.	24 Broad Street
Cutler, James G.	Cutler Building, Rochester, N. Y.
Cutler, Otis H.	30 Church Street
Cutting, Elizabeth B.	37 Madison Avenue
Cutting, R. Bayard	32 Nassau Street
Cutting, R. Fulton	32 Nassau Street
Dailey, John E.	35 Wall Street
Dakin, Arthur H.	6 Beacon Street, Boston, Mass.
Dana, Paul	1 Fifth Avenue
Dashew, Leon D.	80 St. Nicholas Avenue
Davey, W. N.	584 Central Avenue, East Orange, N. J.
Davidson, Walter V.	Care of The Sweeney Co., Buffalo, N. Y.
Davies, Julian T.	32 Nassau Street
Davies, Milton J.	175 Steuben Street, Brooklyn, N. Y.
Davis, Andrew McF.	10 Appleton Street, Cambridge, Mass.
Davis, Charles Q.	790 Riverside Drive
Davis, Daniel A.	52 West 57th Street
Davis, David T.	55 Liberty Street
Davis, Harold S.	735 Exchange Building, Boston, Mass.
Davis, Harrison M.	75 Ames Building, Boston, Mass.
Davis, Horace A.	73 Tremont Street, Boston, Mass.
Davis, J. Lionberger	Third National Bank Building, St. Louis, Mo.
Davis, John	3801 Holmes Street, Dallas, Texas
Davis, John A.	375 Park Avenue
Davis, Pierpont V.	851 North Broad Street, Elizabeth, N. J.
Davis, Robert E.	Gainesville, Fla.
Davis, Vernon M.	194 Lenox Avenue
Davison, H. P.	23 Wall Street
Daw, George W.	202 Cannon Place, Troy, N. Y.
Dawson, Edgar	Normal College
Dawson, Miles M.	141 Broadway
Debevoise, Thomas M.	62 Cedar Street
DeBoer, Joseph Arend	Montpelier, Vt.
Decker, Gustav F.	700 Security Building, St. Louis, Mo.
Decker, Mrs. J. W.	51 West 54th Street
Decker, Martin S.	Public Service Commission, Albany, N. Y.
de Coppet, E. J.	314 West 85th Street
de Forest, H. W.	30 Broad Street

* de Forest, Robert W.	7 Washington Square
De Kay, John W.	111 Broadway
Delmar, Eugene	17 Battery Place
Delafield, Frederick P.	20 Exchange Place
Delahunty, John	Murray Hill Hotel
DeLano, S. S.	165 Broadway
Delano, William Adams	4 East 39th Street
Deming, Horace E.	15 William Street
Demorest, William C.	60 Liberty Street
Demuth, Leopold	600 West End Avenue
Denison, John D., jr.	Bradley Building, Dubuque, Ia.
Dennis, Alfred L. P.	518 Wisconsin Avenue, Madison, Wis.
Dennis, John B.	P. O. Box 1792
Depew, Chauncey M.	27 West 54th Street
Derby, James Lloyd	969 Park Avenue
deRoode, Albert	52 Wall Street
DeSanno, A. P.	1232 Race Street, Philadelphia, Pa.
Devine, Edward T.	607 Kent Hall, Amsterdam Avenue & 116th Street
Dick, J. Harry	20 East 53d Street
Dimock, George E.	907 North Broad Street, Elizabeth, N. J.
Dinkins, Lynn H.	Interstate Trust & Banking Co., New Orleans, La.
Dirnberger, M. F., jr.	178 Lancaster Avenue, Buffalo, N. Y.
Dodd, Allison	307 Belleville Avenue, Bloomfield, N. J.
Dodd, W. F.	University of Illinois, Urbana, Ill.
Dodge, Cleveland H.	99 John Street
Dodge, Miss Grace H.	262 Madison Avenue
Doherty, Henry L.	60 Wall Street
Dommerich, L. W.	314 West 75th Street
Dominick, Gayer G.	115 Broadway
Donald, James H.	Hanover National Bank, 9 Nassau Street
Donovan, H. W.	7 Wall Street
Dorr, Goldthwaite H.	521 West 111th Street
Dougherty, J. Hampden	27 William Street
Douglas, James	99 John Street
Douglas, Walter	Bisbee, Ariz.
Dow, Miss Caroline B.	135 East 52d Street
Dow, Fayette B.	136 West 44th Street
Dowell, E. S.	Hedding College, Abingdon, Ill.
Dowling, Robert E.	165 Broadway
Dowling, Victor J.	27 Madison Avenue
Dows, Tracy	Rhinebeck, N. Y.
Draper, George Otis	1 Madison Avenue
Draper, Mrs. William P.	Hotel Gotham, 5th Avenue & 55th Street
Drayton, J. Coleman	829 Park Avenue
Dreicer, Mrs. Michael	1046 Fifth Avenue
Dreier, Miss Mary E.	118 East 54th Street
Drury, Frank A.	Merchants National Bank, Worcester, Mass.

* Life Member.

* Dryden, Forrest F.	Prudential Insurance Co., Newark, N. J.
DuBois, Charles G.	15 Dey Street
Dulaney, Henry S.	517 West Lombard Street, Baltimore, Md.
Dulles, William	220 Fifth Avenue
Dummer, Mrs. W. F.	679 Lincoln Parkway, Chicago, Ill.
Duncan, R. D.	Care of State Trust Co., Little Rock, Ark.
Dunham, Carroll	Irvington-on-Hudson, N. Y.
* Dunham, Edward K.	36 East 68th Street
Dunn, Henry E.	53 East 79th Street
Dunning, William	Columbia University
Dunstan, J. S.	42 Broadway
Dupuis, Charles W.	Second National Bank, Cincinnati, O.
Duret, Miguel Lanz	2a San Augustin 51, Mexico City, Mexico
Durham, Knowlton	1 Gramercy Park
Duval, H. Rieman	32 Nassau Street
Dwight, John E.	38 Mount Morris Park West
Dymond, John, jr.	339 Carondelet Street, New Orleans, La.
Dynes, Miss Sarah A.	State Normal School, Trenton, N. J.
Earle, Lewis	135 Madison Avenue
Earp, Edwin L.	Drew Forest, Madison, N. J.
Easley, Ralph M.	1 Madison Avenue
Eastman, George	330 East Avenue, Rochester, N. Y.
Eastman, Joseph	71 Broadway
Eastman, Lucius R., jr.	375 Washington Street
Eastman, Samuel C.	Concord, N. H.
Eastman, Sidney Corning	Kenilworth, Ill.
Eaton, Arthur W.	Pittsfield, Mass.
Eaton, Frederick H.	165 Broadway
Eckstein, M. Maurice	258 Riverside Drive
Eddy, Charles B.	62 Cedar Street
Eder, James M.	251 West 95th Street
Edison, Thomas A.	Orange, N. J.
Edmonds, Dean S.	166 West 72d Street
Edmonds, Franklin S.	7818 Lincoln Drive, Philadelphia, Pa.
Edwards, Daniel M.	208 Salina Street, Syracuse, N. Y.
Edwards, Stephen O.	170 Westminster Street, Providence, R. I.
Egleston, Melville	26 Cortlandt Street
Ehrhorn, Oscar W.	15 William Street
Ehrich, Samuel W.	25 Broad Street
Ehrich, W. J.	67 Exchange Place
Eickhoff, Henry	604 Mills Building, San Francisco, Calif.
Eidlitz, Ernest F.	31 Nassau Street
* Eidlitz, Otto M.	489 Fifth Avenue
Eisman, Max	1 West 70th Street
Eisner, Sigmund	Red Bank, N. J.
Elder, Charles B.	79 West Monroe Street, Chicago, Ill.
Eldridge, Frederick L.	580 Fifth Avenue

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Eldridge, Herbert R.	55 Wall Street
Eliot, Ellsworth, jr.	34 East 67th Street
* Elkus, Abram I.	170 Broadway
Ellis, George W.	149 Broadway
Ellis, Ralph	22 West 57th Street
Ellison, William B.	165 Broadway
Ellsworth, Mrs. Magee	55 East 77th Street
Ellsworth, William W.	33 East 17th Street
Elmslie, Mrs. William Gray	7 East 73d Street
Ely, Robert E.	21 West 44th Street
Emery, Thomas	Grand Central Station
Engelhardt, Theobald	678 Willoughby Avenue, Brooklyn, N. Y.
Ensign, Charles S., jr.	30 Court Street, Boston, Mass.
Erb, Newman	42 Broadway
Erbsloh, R.	564 Broadway
Erdmann, Albert J.	30 Broad Street
Erhart, W. H.	81 Maiden Lane
Essing, Arthur	44 West 91st Street
Estabrook, A. F.	15 State Street, Boston, Mass.
Estabrook, H. D.	115 Broadway
Evans, Rowland	221 Federal Building, Indianapolis, Ind.
Ewing, Thomas, jr.	67 Wall Street
Eyer, George A.	37 Wall Street
Fairbanks, Charles W.	Indianapolis, Ind.
Fairchild, Charles S.	35 Fifth Avenue
Fairley, William	195 Kingston Avenue, Brooklyn, N. Y.
Fairlie, John A.	University of Illinois, Urbana, Ill.
Fallows, Edward H.	30 Church Street
Fancher, B. H.	530 Fifth Avenue
Farley, Terence	Hall of Records
Farnam, Henry W.	43 Hillhouse Avenue, New Haven, Conn.
Farnsworth, Fred. E.	11 Pine Street
Farquhar, A. B.	York, Pa.
Farr, George W.	Miles City, Mont.
Farrell, Mrs. John Truitt	59 West 45th Street
Farrell, James A.	71 Broadway
Farrelly, Stephen	182 West 58th Street
Fay, Charles R.	19 Montague Street, Brooklyn, N. Y.
Fayant, Frank H.	55 West 44th Street
Fechheimer, Charles M.	P. O. Box 278, Chickasha, Okla.
Fenwick, Charles G.	2 Jackson Place, Washington, D. C.
Ferguson, Mrs. F.	Box 71, Halesite, Suffolk County, N. Y.
Ferguson, Henry	123 Vernon Street, Hartford, Conn.
Ferris, Frank A.	262 Mott Street
Ferris, T. Harvey	Homestead Aid Building, Utica, N. Y.
Ferry, Mansfield	31 Nassau Street
Field, E. B.	P. O. Drawer 1708, Denver, Colo.

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Fieldman, Sol	108 Northern Avenue
Findley, William L.	2 East 45th Street
Finley, John H.	Albany, N. Y.
Fischer, W. J.	National Bank of Commerce Building, St. Louis, Mo.
Fish, Frederick P.	84 State Street, Boston, Mass.
Fish, Mrs. John C.	19 South Broadway, Shelby, O.
* Fish, Stuyvesant	52 Wall Street
Fisher, Irving	460 Prospect Street, New Haven, Conn.
Fisk, Everett O.	2a Park Street, Boston, Mass.
Fisk, Pliny	62 Cedar Street
Fiske, Haley	1 Madison Avenue
Fitzpatrick, Charles	Supreme Court, Ottawa, Canada
Fitzpatrick, Miss Mary C.	885 Kent Avenue, Brooklyn, N. Y.
Flack, Horace E.	City Hall, Baltimore, Md.
Flagler, J. H.	200 Broadway
Fleming, Henry S.	1 Broadway
Fleitmann, Frederick T.	490 Broome Street
Fletcher, Austin B.	165 Broadway
Fletcher, Isaac D.	17 Battery Place
Flexner, Bernard	Louisville, Ky.
Flint, Charles R.	4 East 36th Street
Floyd, Mrs. Nelson	Syosset, L. I.
Follett, A. D.	St. Clair Building, Marietta, O.
Forbes, Allen B.	56 William Street
Forbes, W. Cameron	Boston, Mass.
Fordham, H. L.	111 Broadway
Fordyce, S. W.	703 Commonwealth Trust Building, St. Louis, Mo.
Forsyth, Ralph K.	41 Pearl Street, Kingston, N. Y.
Fort, John Franklin	Essex Building, Newark, N. J.
Fosdick, Raymond B.	119 West 71st Street
Fowler, Mrs. Anderson	60 East 68th Street
Fowler, Carl H.	55 Liberty Street
Fowler, Clarence	1133 Broadway
Fowler, John C.	622 West Onondaga Street, Syracuse, N. Y.
Fox, Alan	50 Pine Street
Fox, George L.	7 College Street, New Haven, Conn.
Fox, Hugh F.	109 East 15th Street
Fox, Thomas Francis	602 West 157th Street
Frame, Andrew J.	303 Grand Avenue, Waukesha, Wis.
Frankfort, M.	15 East 48th Street
Frankfurter, Felix	Bureau of Insular Affairs, Washington, D. C.
* Frankland, Frederick William	"Okataine," Foxton, Manawatu, New Zealand
Franklin, Fabian	527 West 110th Street
Franklin, George S.	33 East 38th Street
Franklin, Thomas H.	San Antonio, Texas
Franks, Robert A.	Home Trust Co., Hoboken, N. J.

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Frantz, J. F.	25 Maple Avenue, New Rochelle, N. Y.
Fraser, George C.	20 Exchange Place
Freiberg, Maurice J.	3576 Alaska Avenue, Cincinnati, O.
Frelinghuysen, G. G.	32 Liberty Street
French, John	59 Wall Street
French, Nathaniel	Davenport, Ia.
Frew, Walter E.	13 William Street
Frick, Henry C.	640 Fifth Avenue
Friedman, H. G.	66 West 94th Street
Fries, F. H.	Winston-Salem, N. C.
Frissell, A. S.	630 Fifth Avenue
Froment, Frank L.	52 East 74th Street
Frothingham, John W.	14 Wall Street
Frueauff, Charles A.	60 Wall Street
Fuerstman, Joseph A.	222 Washington Street, Newark, N. J.
Fuller, Paul	2 Rector Street
Furnya, M.	216 Second Avenue, South, Seattle, Wash.
Gabriel, John H.	1218 Downing Street, Denver, Colo.
Gallaher, E. Y.	814 West End Avenue
Gallatin, Albert	7 East 67th Street
Gallatin, Francis D.	119 East 38th Street
Gammell, William	50 South Main Street, Providence, R. I.
Gans, Mrs. Howard S.	401 West End Avenue
Garanflo, W. H.	State National Bank, Little Rock, Ark.
Gardiner, Robert H.	Gardiner, Me.
Gardner, Henry B.	54 Stimson Avenue, Providence, R. I.
Gardner, Rathbone	10 Weybosset Street, Providence, R. I.
Gardner, William J.	162 Ralston Avenue, South Orange, N. J.
Garfield, H. A.	Williams College, Williamstown, Mass.
Garner, James W.	Urbana, Ill.
Garrett, Robert	506 Continental Building, Baltimore, Md.
Garst, Julius	Worcester, Mass.
Garvan, Francis P.	903 Park Avenue
Garvin, William E.	4221 Westminster, St. Louis, Mo.
Gaston, George H., jr.	The Apthorp, Broadway and 79th Street
Gattell, Beno B.	115 Broadway
Gavegan, Edward J.	303 West End Avenue
Gavegan, Mrs. Edward J.	303 West End Avenue
Gazzam, Joseph M.	80 Maiden Lane
Geddes, Joseph A.	530 West 123d Street
Geer, Mrs. Walter	246 West 72d Street
Gerard, James W.	United States Embassy, Berlin, Germany
Gettell, Raymond G.	74 Vernon Street, Hartford, Conn.
Giberga, Eliseo	Prado 10, Havana, Cuba
Gifford, James M.	5 Nassau Street
Gilbert, Alexander	Market & Fulton National Bank
Gilbreth, Frank B.	77 Brown Street, Providence, R. I.
Gildersleeve, Ferdinand	Gildersleeve, Conn.
Gillespie, Robert McM.	8 West 53d Street

Gillette, King C.	1566 Beacon Street, Boston, Mass.
Gillies, Edwin J.	245 Washington Street
Gillin, John Lewis	209 Highland Avenue, Madison, Wis.
Gilpin, William Jay	77 Cedar Street
Gilsey, Peter	214 Riverside Drive
Giltner, E. E.	418 West 118th Street
Girelius, Charles G.	Vineland, N. J.
Glasson, William H.	Trinity College, Durham, N. C.
Gleason, Charles J.	170 Broadway
Glenn, John M.	136 East 19th Street
Glyn, W. E.	42 East 67th Street
Goan, Mrs. Orrin S.	226 West 59th Street
Goetz, Jacob H.	531 Schenck Avenue, Brooklyn, N. Y.
Goetze, Frederick A.	Columbia University
Goldberg, Samuel W.	310 West 99th Street
Golding, John N.	9 Pine Street
Goldman, Henry	60 Wall Street
Goldzier, Morris	657 Broadway
Gompers, Samuel	801 G. Street, N. W., Washington, D. C.
Gonzalez, Antonio C.	32 Broadway
Gonzalez, Teodosio	Bermeys 321, Asuncion, Paraguay
Goodhart, Mrs. Albert E.	2 East 55th Street
Goodhart, Philip J.	96 Broadway
* Goodnow, Frank J.	Johns Hopkins University, Baltimore, Md.
Goodrich, George S.	Bronxville, N. Y.
Gordon, Armistead C.	Staunton, Va.
Gordon, F. E.	West Main Street, Conneaut, O.
Gordon, W. S.	68 Leonard Street
Gorton, Adelos	Maple Glen, Montgomery County, Pa.
Gould, E. R. L.	15 West 38th Street
Gould, Horace S.	37 Wall Street
Gould, J. W. DuB.	30 Church Street
Govin, Antonio	70 Dragones Street, Havana, Cuba
Gowan-Stobo, John	1735 McCormick Building, Chicago, Ill.
Grab, Mrs. Helen F.	61 Locust Hill Avenue, Yonkers, N. Y.
Grace, H. H.	867 West 5th Street, Superior, Wis.
Grace, Joseph P.	1 Hanover Square
Graham, Arthur Butler	412 West End Avenue
Gram, Jesse P.	34 Nassau Street
Grant, Percy Stickney	7 West 10th Street
Grant, Rollin P.	Irving National Bank, 92 West Broadway
Grant, William T.	106 Central Park West
Graves, Nelson Z.	22 & 24 South Third Street, Philadelphia, Pa.
Gray, E. McQueen	University of New Mexico, Albuquerque, N. M.
Gray, R. S.	3535 Telegraph Avenue, Oakland, Calif.
Gray, William J.	924 Ford Building, Detroit, Mich.
Green, Herbert	1023 Peoples Gas Building, Chicago, Ill.

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Green, James M.	State Normal School, Trenton, N. J.
Green, Warren L.	70 Broad Street
Greene, Jerome D.	Short Hills, N. J.
Greene, John Arthur	234 West 99th Street
Greene, J. Warren	111 Broadway
Greene, Richard T.	544 West 114th Street
Greene, William H.	Arch & 16th Streets, Philadelphia, Pa.
Greenhut, Benedict J.	6th Avenue and 18th Street
Greeno, F. L.	909 Wilder Building, Rochester, N. Y.
Greenough, William	55 Wall Street
Gregory, R. H.	463 West Street
Grenfell, Wilfred T.	14 Beacon Street, Boston, Mass.
Greve, Charles Theodore	530 Maxwell Avenue, Vernonville, Cincinnati, O.
* Griffin, Frederick R.	Sherbrooke & Simpson Streets, Montreal, Canada
Griffin, J. C.	Hollis, L. I.
Griggs, Edward Howard	Spuyten Duyvil, N. Y.
Griggs, Herbert L.	48 Wall Street
Grinnell, E. Morgan	36 East 50th Street
Griswold, Chester	1733 Broadway
Grossman, Moses H.	115 Broadway
Gubelman, Oscar L.	15 William Street
Guggenheim, Simon	165 Broadway
Guinzburg, A. M.	593 Broadway
Guinzburg, Victor	725 Broadway
Gunther, Franklin L.	391 Fifth Avenue
Guthrie, W. B.	515 West 111th Street
* Guthrie, William D.	28 Park Avenue
Gutierrez, Valeriano	11 Broadway
Guy, Charles L.	335 Convent Avenue
Guye, Charles Henry	44 West 69th Street
Gwinn, Ralph W.	2 Rector Street
Gwinnell, William B.	545 Mt. Prospect Avenue, Newark, N. J.
Gwynn, Joseph K.	29 Broadway
Haas, W. D.	Bunkie, La.
Hass, Kalman	7 East 69th Street
Hackett, Corcellus H.	31 Union Square
Haeselbarth, Adam C.	Leonia, N. J.
Hagerman, H. J.	Roswell, New Mexico
Hagner, A. B.	1818 H. Street, Washington, D. C.
Hainer, E. J.	Fraternity Building, Lincoln, Neb.
Hale, George D.	1059 Lake Avenue, Rochester, N. Y.
Hale, Ledyard P.	Capitol, Albany
Hale, Robert L.	537 West 121st Street
Halff, Mayer L.	37 Wall Street
Hall, Fred. J.	Tarrytown, N. Y.
Hall, Henry B.	107 East 65th Street
Hall, John R.	100 Broadway

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Halladay, Reginald	Englewood, N. J.
* Halsey, Frederic R.	22 West 53d Street
Ham, Arthur H.	130 East 22d Street
Hamburger, L.	91 Fifth Avenue
Hamilton, Foster	Care of The Bank of Alabama, Ensley, Ala.
Hamilton, John L.	Hoopestown, Ill.
Hamilton, H. A.	New Bank of Commerce Building, St. Louis, Mo.
Hamlin, Philip	Telephone Building, Denver, Colo.
Hammill, C. W.	71 Broadway
Hammond, Henry B.	51 Chambers Street
* Hammond, John Hays	71 Broadway
Hammond, Mrs. John Hays	2315 Massachusetts Ave., Washington, D. C.
Hammond, John Henry	40 Wall Street
Hammond, W. W.	699 Lafayette Avenue, Buffalo, N. Y.
Hanaman, Charles E.	P. O. Box 527, Troy, N. Y.
Hanbridge, W. D.	99 John Street
Handy, Parker D.	22 Pine Street
Hanford, H. B.	633 Cooper Street, Camden, N. J.
Hansmann, Carl A.	96 Broadway
Harbeck, Charles T.	306 Lexington Avenue
Hardon, Henry W.	315 West 71st Street
Hardy, Sarah B.	419 West 118th Street
Hare, Montgomery	109 East 64th Street
Harkins, Walter S.	Presbonsburg, Ky.
Harkness, W. L.	12 Broadway
Harmon, William E.	261 Broadway
Harned, Franklin M.	266 Lincoln Road, Brooklyn, N. Y.
Harper, R. A.	2936 Bainbridge Avenue
Harriman, Mrs. J. Borden	35 East 49th Street
Harrington, Howard Sawyer	64 Wall Street
Harris, Albert H.	135 Central Park West
Harris, John F.	15 Wall Street
Harrison, W. Z.	Commercial Club, Salt Lake City, Utah
Hart, Albert Bushnell	5 Quincy Chambers, Cambridge, Mass.
Hart, Hastings H.	105 East 22d Street
Hartshorn, Stewart	Short Hills, N. J.
Hartzell, Charles	San Juan, Porto Rico
Harvey, A. M.	1405 Polk Street, Topeka, Kansas
Harvey, George	Care of Harper Brothers, Franklin Square
Hasbrouck, Isaac E.	364 Carlton Avenue, Brooklyn, N. Y.
Haskell, J. Amory	Room 1609, 140 Cedar Street
Haskell, Mrs. W. P.	80 Morningside Drive
Haskin, Lincoln B.	58 Main Street, Hempstead, N. Y.
Hasse, Miss Adelaide R.	476 Fifth Avenue
Hasslacher, Jacob	100 William Street
Hastings, H. S.	St. Mary's, Elk County, Pa.

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Hastings, W. G.	Station "A," Lincoln, Neb.
Hatch, A. J.	20 Broad Street
Hatch, Edward W.	37 Wall Street
Hathaway, Charles	45 Wall Street
Havemeyer, F. C.	34 East 37th Street
Hawkins, Eugene D.	51 East 67th Street
Hawley, J. S., jr.	3530 Third Street, San Diego, Calif.
Hay, Woodhull	164 East 61st Street
Haynes, James B.	748 Omaha Natl. Bank, Omaha, Neb.
Hazeltine, H. D.	Emmanuel College, Cambridge, England
Hazard, F. R.	P. O. Box 2, Syracuse, N. Y.
Hazen, George H.	381 Fourth Avenue
Healy, A. Augustus	70 Gold Street
Heaney, Frank J.	502 Broadway
Heath, James E.	Law Building, Norfolk, Va.
Hebbard, Edgar C.	28 Nassau Street
Hecker, Frank J.	915 Union Trust Building, Detroit, Mich.
Hedges, Job E.	165 Broadway
Heffner, William Clinton	Lock Box No. 57, Toledo, O.
Heine, M. Casewell	Kinney Building, Newark, N. J.
Heller, William H.	400 West End Avenue
Hellier, Charles E.	57 Equitable Building, Boston, Mass.
Henderson, Edward C.	52 William Street
Hendren, W. M.	520 Spring Street, Winston-Salem, N. C.
Hentz, Henry	22 William Street
Hepburn, A. Barton	83 Cedar Street
Hepburn, Mrs. A. Barton	205 West 57th Street
Herczeg, Josika	28 West 10th Street
Herrod, H. E.	1631 Unity Building, Chicago, Ill.
Hershey, Omer F.	Mt. Washington, Md.
Hertenstein, Frederick	3870 Reading Road, Avondale, Cincinnati, O.
Herzog, Paul M.	Woolworth Building
Hess, Walter L.	450 Fourth Avenue
Hessberg, Albert	57 State Street, Albany, N. Y.
* Hewitt, H. H.	111 Broadway
Heyman, David M.	314 West 87th Street
Hibben, Paxton	121 East 21st Street
Hicks, F. C.	7 Wall Street
Hiester, A. V.	320 Race Avenue, Lancaster, Pa.
Higby, Chester P.	210 Newton Street, Fairmont, West Va.
Higginson, Henry L.	44 State Street, Boston, Mass.
Hill, Edward Finch	333 Nelson Avenue, Peekskill, N. Y.
Hill, James J.	Room 415, Great Northern Railway Building, St. Paul, Minn.
Hill, William Burr	160 Broadway
Hillard, C. W.	71 Broadway
Hillhouse, James	Sachem's Wood, New Haven, Conn.
Hillhouse, Mrs. James	Sachem's Wood, New Haven, Conn.

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Hinckley, T. L.	66 University Building, Milwaukee, Wis.
Hinds, Roger	115 Broadway
Hine, Francis L.	2 Wall Street
Hines, W. D.	52 William Street
Hirsch, Morris J.	160 Broadway
Hirsch, Robert B.	Stamford, Conn.
Hirth, Friedrich	401 West 118th Street
Hitchcock, Frederick S.	Box 202, New London, Conn.
Hoadley, Horace G.	16 Fiske Street, Waterbury, Conn.
Hoagland, Joseph C.	16 William Street
Hochschild, B.	P. O. Box 957
Hodgman, George B.	806 Broadway
Hoe, Arthur I.	Bedford Hills, N. Y.
Hoe, Mrs. Robert	180 West 59th Street
Hoffman, Frank S.	2 College Grounds, Schenectady, N. Y.
Hoffman, Frank S.	The Prudential Insurance Co., Newark, N. J.
Hoggson, W. J.	7 East 44th Street
Holbrook, Percy	The Lucerne, 79th Street & Amsterdam Avenue
Holcomb, Alfred E.	15 Dey Street
Holden, Arthur J.	Bennington, Vt.
Holden, Mrs. Edwin B.	323 Riverside Drive
Hollister, George Clay	New Rochelle, N. Y.
Hollister, Granger A.	Rochester, N. Y.
Holloway, Harry D.	508 Land Title Building, Philadelphia, Pa.
Holly, Miss Mary Kissam	252 West 76th Street
Holmes, D. A.	20 Broad Street
Holmes, J. M.	Pierce Building, St. Louis, Mo.
Holt, Lucius H.	West Point, N. Y.
Holter, Edwin O.	Mount Kisco, N. Y.
Holstein, George M.	61 Broadway
Homer, C. S.	West Townsend, Mass.
Homer, Francis T.	40 Wall Street
Hopkins, Arthur T.	Care of Mechanical Rubber Co., Cleveland, O.
Hopkins, George B.	42 Broadway
Hopkins, W. J.	821 College Avenue, Racine, Wis.
Hopper, John J.	215 West 125th Street
Hornblower, William B.	5 East 89th Street
Horsey, Charles Lee	Pioche, Nevada
Horst, George D.	Reading, Pa.
Hotchkiss, William H.	55 Liberty Street
Hothorn, E. G.	42 Broadway
Hottenstein, Marcus S.	Commonwealth Building, Allentown, Pa.
Hourwich, Isaac A.	180 Hewes Street, Brooklyn, N. Y.
Howard, Frederick B.	56 Arlington Street, Brockton, Mass.
Howe, Edward L.	Princeton, N. J.
Howe, Frank E.	Troy, N. Y.
Howe, James B.	22 West Highland Drive, Seattle, Wash.
Howell, Mrs. John White	211 Ballantine Parkway, Newark, N. J.
Howell, Usher B.	Riverhead, N. Y.

Howell, Wilson S.	Pleasantville Station, Westchester County, N. Y.
Howison, George H.	2631 Piedmont Avenue, Berkeley, Calif.
Hoyt, Allen G.	49 Wall Street
Hoyt, Arthur S.	90 West Broadway
Hoyt, F. C.	66 Third Avenue
Hoyt, Henry M.	Goldfield, Nevada
Hoyt, Theodore R.	72 Gold Street
Hubbard, Walter C.	Coffee Exchange Building
Hubbard, W. P.	901 Schmulbach Building, Wheeling, West Va.
Hudson, Sydney D. M.	Bryn Mawr, Pa.
Hulet, J. R.	Holbrook, Ariz.
Hull, George H.	Tuxedo Park, N. Y.
Humphreys, Alex C.	Stevens Institute of Technology, Hoboken, N. J.
Hunley, W. M.	University of Virginia, Charlottesville, Va.
Hunt, Mrs. Leigh	563 Park Avenue
* Huntington, Archer M.	1083 Fifth Avenue
Huntington, Francis C.	54 William Street
Huntsman, Owen B.	165 Broadway
Hutchinson, Edward S.	34 South State Street, Newtown, Pa.
Huyler, Coulter D.	260 West 76th Street
* Hyams, Godfrey M.	P. O. Box 5104, Boston, Mass.
Hyde, Henry St. John	210 East 18th Street
Hyde, Justus C.	1488 East 14th Street, Brooklyn, N. Y.
Hyde, Wesley W.	325 East Fulton Street, Grand Rapids, Mich.
Hyman, Miss Louise	49 West 56th Street
Hyslop, James H.	519 West 149th Street
Ichinomiya, R.	55 Wall Street
* Iles, George	Park Avenue Hotel
Imbrie, James	301 West 75th Street
Imhoff, C. H.	195 Broadway
Ingalls, C. H.	New Brighton, N. Y.
Ingham, William H.	Algona, Ia.
Ingraham, Arthur	80 Irving Place
Ingraham, George S.	44 Court Street, Brooklyn, N. Y.
Irwin, I. I.	San Diego, Calif.
Iselin, Adrian, jr.	711 Fifth Avenue
Iselin, Mrs. W. E.	745 Fifth Avenue
Isman, Felix	1328 South Pennsylvania Square, Philadelphia, Pa.
Ivins, William M.	27 William Street
Jackson, Fred S.	824 Kansas Avenue, Topeka, Kansas
Jackson, Percy	43 Cedar Street
Jacobs, Ralph K.	215 Montague Street, Brooklyn, N. Y.
James, Mrs. Arthur Curtiss	92 Park Avenue
James, Walter B.	17 West 54th Street
James, Mrs. Walter B.	17 West 54th Street
Jaquith, Harry J.	4 Post Office Square, Boston, Mass.
Jarvie, James N.	66 Broadway

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Jay, Delancey K.	26 Liberty Street
Jefferson, Howard McN.	80 Downing Street, Brooklyn, N. Y.
Jeidels, Otto	Nehrenstr. 32, Berlin, Germany
Jenkins, Mrs. Helen Hartley	232 Madison Avenue
Jenks, Jeremiah W.	13 Astor Place
Jennings, Frederick B.	86 Park Avenue
Jenswold, John, jr.	407 Palladio Building, Duluth, Minn,
Jess, Stoddard	2133 Harvard Building, Los Angeles, Calif.
Jewett, George L.	20 Fifth Avenue
Johnes, William F.	2428 Lorillard Place
Johnson, Bradish G.	829 Park Avenue
Johnson, Charles P.	Navarre Building, St. Louis, Mo.
Johnson, Mrs. Eastman	65 West 55th Street
Johnson, Frederick	42nd Street Building
Johnson, F. Coit	110 Worth Street
Johnson, Grafton	Greenwood, Indiana
Johnson, J. Augustus	460 Scotland Road, South Orange, N. J.
Johnson, Rankin	37 Madison Avenue
Johnson, Remsen	187 Broadway
Johnston, Allen W.	500 State Street, Schenectady, N. Y.
Jonas, Stephen	60 Wall Street
Jones, Breckinridge	Care of Mississippi Valley Trust Co., St. Louis, Mo.
Jones, James H.	Box 69, R. F. D. No. 1, Lakeland, Fla.
Joy, Edmund Steele	26 Halsey Street, Newark, N. J.
Joy, Russell T.	155 Montague Street, Brooklyn, N. Y.
Judson, Harry Pratt	The University of Chicago, Chicago, Ill.
Judson, Henry I.	96 Broadway
Juillard, A. D.	70 Worth Street
Kagey, C. L.	Beloit, Kansas
* Kahn, Otto H.	52 William Street
Kakiuchi, T.	55 Wall Street
Kalaw, Teodore	Paco, Manila, P. I.
Kaul, John L.	Birmingham, Ala.
Kayser, Julius	45 East 17th Street
Kebabian, George S.	60 Wall Street
Keedy, Edwin R.	31 West Lake Street, Chicago, Ill.
Keenan, Thomas J.	Binghamton, N. Y.
Keep, Charles H.	60 Broadway
Kehew, Mrs. Mary Morton	29a Chestnut Street, Boston, Mass.
Kelley, David J.	1925 Seventh Avenue
Kelley, James E.	34 Montrose Street, Somerville, Mass.
Kellogg, Joseph A.	Glens Falls, N. Y.
Kellor, Miss Frances A.	118 East 54th Street
Kemmerer, E. W.	Princeton University, Princeton, N. J.
Kemmerer, Roy C.	922 Eastern Parkway, Brooklyn, N. Y.
Kempner, Otto	44 Court Street, Brooklyn, N. Y.
Kennedy, J. A. C.	620 South 38th Street, Omaha, Neb.

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Kenney, James W.	234 Seaver Street, Roxbury, Boston, Mass.
Kent, Fred I.	7 Wall Street
Kenyon, Albert J.	165 Broadway
Kenyon, Robert N.	49 Wall Street
Keppelman, John Arthur	540 Court Street, Reading, Pa.
Kerr, David S.	46 Arlington Avenue, Westmount, Montreal, Canada
Kerr, Walter	52 Wall Street
Kidder, Edward H.	17 Battery Place
Kientzle, J. P.	256 East 11th Street, Erie, Pa.
Kilner, Samuel E.	115 Broadway
Kilroe, Edwin P.	5 Beekman Street
Kimball, Charles E.	52 William Street
Kimball, Everett	Smith College, Northampton, Mass.
King, Miss Elizabeth G.	48 College Street, Providence, R. I.
King, Landreth H.	Grand Central Station
Kingsbury, Herbert D.	200 Fifth Avenue
Kingsley, Darwin P.	346 Broadway
Kingsley, W. M.	45 Wall Street
Kinsey, Oliver P.	Valparaiso, Ind.
Kiplinger, John H.	Rushville, Ind.
Kirchberger, M.	380 Second Avenue
Kirchwey, George W.	Columbia University
Klar, A. Julian	130 Montague Street, Brooklyn, N. Y.
Knapp, Joseph P.	19th Street & Fourth Avenue
Knapp, Mrs. Harry K.	34 East 35th Street
Knapp, Martin A.	Interstate Commerce Commission, Washington, D. C.
Knauth, Antonio	39 West 76th Street
Knauth, Mrs. Percival	302 West 76th Street
Kneeland, George J.	784 East 179th Street
Kneeland, Yale	117 East 60th Street
Knevels, Miss M. E.	48 Wheeler Street, West Orange, N. J.
Knox, Arthur	198 Broadway
Knox, Herbert Allen	198 Broadway
Kohlmann, Hugo	30 Broad Street
Korff, S. A.	University of Finland, Helsingfors, Finland
Korsmeyer, Frederick A.	Glen Cove, L. I.
Kountze, W. de Lancey	51 East 51st Street
Kramer, A. Ludlow	Roslyn, L. I.
Krech, Mrs. Alvin	26 West 58th Street
Kudlich, H. C.	233 Broadway
Kuhn, Arthur K.	308 West 92d Street
Kume, M.	450 Fourth Avenue
Kursheedt, Manuel A.	302 Broadway
Kurtz, William B.	321 Chestnut Street, Philadelphia, Pa.
Kuser, Anthony R.	Bernardsville, N. J.
LaBoyteaux, G. B., jr.	82 Beaver Street
Lacy, Graham G.	The Tootle-Lemon National Bank, St. Joseph, Mo.
LaFollette, Robert M.	United States Senate, Washington, D. C.
LaFollette, W. T.	Siloam Springs, Ark.

Laffey, J. P.	1114 Rodney Street, Wilmington, Del.
Lafrentz, F. W.	100 Broadway
Lake, Emma S.	309 West 93d Street
Lamar, Lucius Q. C.	P. O. Box 1729, Havana, Cuba
Lamb, Anthony	Syracuse, N. Y.
Lambert, Adrian V. S.	168 East 71st Street
* Lamont, Thomas W.	23 Wall Street
Landy, George	281 East Broadway
Langeloth, Jacob	P. O. Box 957, Riverside, Conn.
Lapham, Mrs. J. J.	46 East 67th Street
Largey, M. S.	State Savings Bank, Butte, Mont.
Larremore, Wilbur	32 Nassau Street
Lathrop, Alanson P.	40 Wall Street
Lathrop, Gardiner	1011 Railway Exchange, Chicago, Ill.
Lauer, Edgar J.	624 Madison Avenue
Lauterbach, Edward	22 William Street
Lauterbach, Mrs.	761 Fifth Avenue
Lawler, Thomas B.	70 Fifth Avenue
Lawrence, William W.	9 East 89th Street
Lawson, John Davison	University of Missouri, Columbia, Mo.
Lawson, Victor F.	15 Fifth Avenue N., Chicago, Ill.
Leach, A. B.	149 Broadway
Leake, Eugene W.	239 Washington Street, Jersey City, N. J.
Leary, Mrs. George	1053 Fifth Avenue
Leary, William V.	173 West 87th Street
LeBosky, Jacob C.	Room 820, 127 North Dearborn Street, Chicago, Ill.
Leckie, A. E. L.	Southern Building, Washington, D. C.
Lee, E. A.	Oakland Road, South Orange, N. J.
Lee, H. M.	59 Pearl Street
* Leeds, Mrs. Warner Mifflin	11 East 65th Street
Leffingwell, R. C.	52 William Street
LeGendre, William	59 Wall Street
Léger, J. N.	Port au Prince, Haiti
Legg, Chester Arthur	63 Board of Trade Building, Chicago, Ill.
Lehman, Arthur	16 William Street
Lehman, Irving	County Court House
Leland, Arthur S.	40 Exchange Place
Leland, Francis L.	New York County National Bank
Leland, Lester	101 Milk Street, Boston, Mass.
Lemaghi, Louis F.	Collinsville, Ill.
Lesher, Arthur L.	670 Broadway
Lesinsky, Albert R.	149 Broadway
Leverett, George V.	53 Devonshire Street, Boston, Mass.
Levi, Julian Clarence	105 West 40th Street
Levy, Charles E.	Cotton Exchange Building
Levy, Felix H.	268 West 94th Street
Lewis, Burdette G.	51 Chambers Street

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Lewisohm, Sam A.	61 Broadway
Lichtenstein, Alfred	171 West 71st Street
Liddle, Joseph G.	33 Clinton Place, Hackensack, N. J.
Liebeskind, Solon J.	Liberty Tower
Liebman, David	40 East 72nd Street
Light, John H.	South Norwalk, Conn.
Lightner, Clarence A.	901 Penobscot Building, Detroit, Mich.
Limburg, H. R.	160 Broadway
Lincoln, Jonathan T.	Fall River, Mass.
Lincoln, Lowell	345 Broadway
Lindsay, C. Seton	Room 407, 346 Broadway
Lindsay, John D.	34 West 11th Street
Lindsay, L. Seton	346 Broadway
* Lindsay, Samuel McCune	Columbia University
Lines, George	Pabst Building, Milwaukee, Wis.
Lingley, Richard T.	527 Fifth Avenue
Linton, Charles C.	40 East 41st Street
Lipe, Walter H.	Canajoharie, N. Y.
Lipman, F. L.	Care of Wells Fargo Nevada Natl. Bank, San Francisco, Calif.
Lippitt, Costello	Norwich, Conn.
Lisman, F. J.	30 Broad Street
Littauer, Lucius N.	715 Broadway
Littleton, Jesse M.	Chattanooga, Tenn.
Littleton, Martin W.	2 Rector Street
Livermore, Arthur L.	30 Broad Street
Livingston, Robert E.	1 Madison Avenue
Lockwood, Stephen O.	17 East 57th Street
Loeb, C. M.	52 Broadway
Loeb, Isidor	University of Missouri, Columbia, Mo.
Loeb, Jacob M.	29 South LaSalle Street, Chicago, Ill.
Loeb, James	52 William Street
Loeb, Otto S.	35 Wall Street
Loesch, Frank J.	Room 1540, 10 South Lasalle Street, Chicago, Ill.
Loeser, Vincent	320 West 108th Street
Loewenthal, Max	414 Wilcox Block, Los Angeles, Calif.
Loewy, Benno	208 Broadway
Lombardi, C.	"The News," Dallas, Texas
Loomis, Guy	817 Carroll Street, Brooklyn, N. Y.
Lord, Chester S.	57 South Portland Avenue, Brooklyn, N. Y.
Lough, W. H.	13 Astor Place
Lovejoy, Owen R.	105 East 22nd Street
Lovett, Robert Scott	Locust Valley, L. I.
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Ludlum, Charence A.	57 Highland Avenue, Jamaica, L. I.
Lummis, Miss Eliza O'B.	324 West 103rd Street
Lundien, E. M.	Dayton, Iowa
Lustgarten, W.	68 William Street
Ly, Juwan Usang	8 Kow Dow Lane, Canton, China
Lyall, William L.	349 Aycrigg Avenue, Passaic, N. J.
Lybyer, Albert Howe	153 South Cedar Avenue, Oberlin, Ohio
Lydig, Philip M.	38 East 52nd Street
Lyons, Samuel Clay	Louisville, Ky.
Maas, Charles O.	87 Nassau Street
Mabon, James B.	59 West 70th Street
MacArthur, Arthur F.	11 Pine Street
MacDonald, Charles B.	71 Broadway
MacDonald, George	315 West 90th Street
MacDuffie, Rufus L.	Bronxville, N. Y.
Macfarland, Charles S.	215 Fourth Avenue
Machen, Arthur W., jr.	Central Savings Bank Building, Baltimore, Md.
Mackay, Clarence H.	253 Broadway
MacKelvie, N. Bruce	25 Broad Street
Maclay, Mark W., jr.	830 Park Avenue
MacLean, Charles F.	5th Avenue and 130th Street
MacLean, James A.	University of Manitoba, Winnipeg, Canada
Macleod, William A.	Westwood, Mass.
MacVeagh, Franklin	194 North Wabash Avenue, Chicago, Ill.
Macy, Carleton	Hewlett, L. I.
Macy, Miss Carroll	Birch Corners, Hewlett, L. I.
* Macy, V. Everit	68 Broad Street
Madeira, Mrs. Percy C., jr.	Jenkintown, Pa.
Mahoney, Stephen A.	630 Dwight Street, Holyoke, Mass.
Main, William A.	214 Broadway
Mairs, Mrs. E. H.	Irvington-on-Hudson, N. Y.
Malkenson, Arthur L.	102 Bowery
Mandlebaum, Miss M.	205 West 57th Street
Manning, William T.	27 West 25th Street
Manning, W. W.	70 State Street, Boston, Mass.
Mansfield, Howard	49 Wall Street
Marden, Francis Skiddy	449 Park Avenue
Markle, John	Jeddo, Pa.
Markle, Mrs. John	723 Fifth Avenue
Marks, Laurence H.	Lawrence, L. I.
Marks, Marcus M.	687 Broadway
Marling, Alfred E.	35 West 47th Street
Marrone, Joseph M.	Utica, N. Y.

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Marsh, Robert McC.	45 West 11th Street
* Marshall, Louis	47 East 72d Street
Marshall, W. H.	135 Central Park West
Marston, Edgar L.	24 Broad Street
Marston, Edwin S.	16 William Street
Martin, Bradley, jr.	6 East 87th Street
Martin, John	Grymes Hill, Stapleton, S. I.
Martin, Newell	20 Exchange Place
Martin, R. W.	25 Nassau Street
Martindale, J. B.	270 Broadway
Marvel, Josiah	Wilmington, Del.
Marx, Otto	Birmingham, Ala.
Masters, Miss L. B.	Dobbs Ferry, N. Y.
Mather, Samuel	Western Reserve Building, Cleveland, O.
Mathews, Charles T.	30 West 57th Street
Mathews, George Brewster	830 Delaware Avenue, Buffalo, N. Y.
Mathewson, Charles F.	55 Wall Street
Matienzo, José Nicolás	3770 Calle Santa Fe, Buenos Aires, R. A.
Matthews, Albert	Hotel Oxford, Boston, Mass.
Matthews, C. B.	Union Trust Building, Cincinnati, O.
Matthews, T. A.	165 Broadway
Maurice, William G.	Hot Springs, Ark.
Maxwell, Robert	334 Fourth Avenue
Mayer, Julius M.	Post Office Building
Mayer, Levy	Blackstone Hotel, Chicago, Ill.
Mayhoff, Mrs. Carl von	59 East 34th Street
McAdoo, W. G.	30 Church Street
McAllister, Henry, jr.	1880 Gaylord Street, Denver, Colo.
McAneny, George	19 East 47th Street
McBain, Howard Lee	Columbia University
McCall, John C.	346 Broadway
McCamic, Charles	Wheeling, West Va.
McCarty, Barclay E.	3 South William Street
McCausland, George C.	Maplewood Farm, Woodstock, Vt.
McCleary, James T.	30 Church Street
McClement, J. H.	135 Broadway
McCormick, Mrs. Harold F.	1000 Lake Shore Drive, Chicago, Ill.
McCready, N. L.	38 Wall Street
McCrum, Lloyd G.	103 Park Avenue
McDavitt, Clarence G.	50 Oliver Street, Boston, Mass.
McDonough, Charles A.	18 Tremont Street, Boston, Mass.
McElderry, H. L.	Talladega, Ala.
McEnerney, Garrett W.	1277 Flood Building, San Francisco, Calif.
McGarrah, G. W.	50 Wall Street
McGinley, J. R.	5000 Forbes Street, Pittsburgh, Pa.
McGrath, Miss Madge	2134 Napoleon Avenue, New Orleans, La.
McGraw, James H.	239 West 39th Street

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McIntyre, William H.	970 Park Avenue
McKenna, Thomas P.	41 Wall Street
McKeon, John C.	Hempstead, N. Y.
McLaren, Kenneth K.	37 Wall Street
McLean, A. W.	Lumberton, N. C.
McMahon, J. Sprigg	Dayton, O.
McMillin, Emerson	40 Wall Street
McNeir, George	575 Fifth Avenue
McNulty, William D.	141 Broadway
McPherson, Logan G.	Bureau of Railway Economics, Washington, D. C.
McQueen, W.	Ludowici, Ga.
McReynolds, J. C.	Department of Justice, Washington, D. C.
McRoberts, Samuel	55 Wall Street
Mead, Joseph H.	The County Trust Co., White Plains, N. Y.
Meagley, George C.	The Sherman, Washington, D. C.
Mehan, William A.	Balston Spa, N. Y.
Meldrim, Peter W.	Savannah, Ga.
Melville, Frank, jr.	28 Monroe Place, Brooklyn, N. Y.
Melvin, E. C.	Selma National Bank, Selma, Ala.
Mereness, Newton D.	569 West 173rd Street
Mercer, Hugh Victor	2617 Lake of Isles, Minneapolis, Minn.
Merkel, William F. C.	842 Broadway
Mershon, Ralph D.	65 West 54th Street
Metcalf, E. P.	Atlantic National Bank, Providence, R. I.
Metcalfe, J. G.	273 South Street, Morristown, N. J.
Metz, Herman A.	122 Hudson Street
Meyer, Mrs. Aubrey Edgerton	The Castle, Whitehall, N. Y.
Meyer, Ernst C.	Room 224, Custom House
Meyer, Eugene, jr.	7 Wall Street
Meyer, Hermann H. B.	Library of Congress, Washington, D. C.
Milburn, John G.	16 West 10th Street
Miller, Charles R.	Times Building
Miller, E. C.	115 Bank Street
Miller, George N.	811 Madison Avenue
Miller, Henry F.	44 Pine Street
Miller, Samuel H.	121 East Union Avenue, Bound Brook, N. J.
Miller, W. B.	Chattanooga, Tenn.
Mills, Ogden L.	15 Broad Street
Mills, W. McMaster	753 Fifth Avenue
Mitchell, Edward Page	"The Sun" Office
* Mitchell, Wesley C.	Columbia University
Mix, M. W.	Mishawaka, Ind.
Moebius, Charles	95 Madison Avenue
Mohrenstecher, G. A.	Long Beach, Calif.

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Monroe, Robert Grier	26 Liberty Street
Montgomery, Robert H.	55 Liberty Street
Moonan, John	Waseca, Minn.
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Moore, John W.	The Citadel, Charleston, S. C.
Moot, Adelbert	45 Erie County Savings Bank, Buffalo, N. Y.
Morawetz, Victor A.	44 Wall Street
Mordecai, T. Moultrie	Broad & State Streets, Charleston, S. C.
More, C. E.	318 Home Insurance Building, Chicago, Ill.
Morgan, Miss Anne	219 Madison Avenue
Morgan, George Wilson	32 Liberty Street
Morgan, William Fellowes	Arch 5, Brooklyn Bridge
* Morgenthau, Henry	30 East 42d Street
Morgenthau, J. C.	87 Nassau Street
* Morris, Newbold	115 East 73d Street
Morris, William R.	1020 Metropolitan Life Building, Minneapolis, Minn.
Morrison, George Austin	27 Beaver Street
Morrow, Dwight W.	62 Cedar Street
Morse, Anson D.	Amherst College, Amherst, Mass.
Morse, A. E.	223 Fourth Street, Marietta, O.
Morse, Edmund H.	117 West 58th Street
Mosby, Thomas Speed	Jefferson City, Mo.
Mott, Howard S.	16 Wall Street
Moulton, Irving F.	2199 Devisadero Street, San Francisco, Calif.
Munn, John P.	18 West 58th Street
Munroe, Vernon	Englewood, N. J.
Murphy, Franklin	224 McWhorter Street, Newark, N. J.
Murray, Charles A.	R. F. D. No. 1, Tacoma, Wash.
Muschenheim, Mrs. Frederick A.	218 West 45th Street
Mussey, Henry Raymond	Columbia University
Myers, Nathaniel	135 Central Park West
Myers, Theodore W...	44 West 77th Street
Myers, W. Fenton	20 Market Street, Amsterdam, N. Y.
Nagel, Charles	Federal Building, St. Louis, Mo.
Nardin, William T.	815 Central National Bank Building, St. Louis, Mo.
Neal, Emmett O.	Montgomery, Ala.
Neil, M. M.	Trenton, Tenn.
Neilson, Jason A.	59 Wall Street
Nevius, David	160 Fifth Avenue
Newcomer, Waldo	National Exchange Bank, Baltimore, Md.
Newton, Howard D.	371 North Broad Street, Norwich, N. Y.
Nichols, Morton C.	1 East 39th Street
Nicholson, John	32 Nassau Street
Nicholson, J. Lee	346 Broadway
Nicoll, DeLancey	23 East 39th Street
Noble, Alfred	501 West 120th Street
Nolan, Edward C.	First National Bank, Reading, Pa.

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Northrop, Charles P.	49 St. Nicholas Place
Norton, Charles D.	36 East 36th Street
Nottingham, William	701 Walnut Avenue, Syracuse, N. Y.
Noyes, Henry T.	Rochester, N. Y.
Nunemacher, F. C.	30 Church Street
Oakman, Walter G.	62 Cedar Street
Obermayer, C. J.	502 Eighth Avenue, Brooklyn, N. Y.
O'Brien, Thomas J.	Grand Rapids, Mich.
Ochs, Adolph	New York Times
Odom, P. H.	Jacksonville, Fla.
Oeland, Isaac R.	189 Montague Street, Brooklyn, N. Y.
Ogden, Rollo	20 Vesey Street
O'Gorman, Richard	51 Chambers Street
Ogg, Frederic A.	401 Broadway, Cambridge, Mass.
Olin, Stephen H.	32 Nassau Street
Olney, Peter B.	68 William Street
Olney, Richard	710 Sears Building, Boston, Mass.
Olsen, Harry	917 City Hall, Chicago, Ill.
Onozuka, K.	36 Kobinata-Daimachi-Nichome, Koishi Kawa, Tokyo, Japan
Opdyke, William S.	20 Nassau Street
Oppenheim, Edward L.	104 East 65th Street
Oppenheim, J. D.	29 West 86th Street
Oppenheimer, Henry S.	11 East 43d Street
Ordway, Samuel H.	27 William Street
Ortiz, Fernando	Aguiav 68, Havana, Cuba
Orton, Philo A.	Darlington, Wis.
Osborn, Mrs. Henry Fairfield	850 Madison Avenue
Osborn, William Church	71 Broadway
Osgood, Herbert L.	526 West 150th Street
Otto, Henry S.	1876 Broadway
Outerbridge, E. H.	11 Broadway
Owens, George W.	Citizens Trust Building, Savannah, Ga.
Owens, W. W.	289 Clinton Avenue, Brooklyn, N. Y.
Page, Alfred R.	County Court House
Page, Edward D.	Oakland, N. J.
Page, Howard W.	32 South Broad Street, Philadelphia, Pa.
Page, William H.	66 Liberty Street
Paine, George H.	718 Land Title Building, Philadelphia, Pa.
Palmer, A. Wheeler,	62 Cedar Street
Palmer, Henry B.	334 Canal Street
Palmieri, F. L.	50 East 63rd Street
Pam, Max	71 Broadway
Parish, Edward C.	52 Wall Street
Parish, Henry	52 Wall Street
Park, M. C. H.	Waco, Texas
Parker, Alton B.	Esopus, N. Y.
Parker, Ashton	330 West 85th Street
Parker, Robert A.	81 Fulton Street
Parsons, Herbert	52 William Street

Parsons, John E.	52 William Street
Parsons, W. L.	Rockingham, N. C.
Partridge, Frank H.	140 West 69th Street
Paskus, Benjamin G.	128 Broadway
Patteson, Robert A.	Tarrytown, N. Y.
Patterson, John L.	Roanoke Rapids, N. C.
Patterson, W. J.	60 Broadway
Paul, Amasa C.	504 Ridgewood Avenue, Minneapolis, Minn.
Payne, James M.	1210 Virginia Street, Charleston, West Va.
Pearson, F. S.	115 Broadway
Peaslee, Edward H.	17 Washington Square North
Peckitt, Leonard	Catasauqua, Pa.
Peek, Burton F.	Moline, Ill.
Peierls, Siegfried	260 Fourth Avenue
Penman, John Simpson	"Holywell," Katonah, N. Y.
Penrose, Stephen B. L.	41 College Avenue, Walla Walla, Wash.
Perkins, George E.	10 East 41st Street
Perkins, George W.	71 Broadway
Perkins, Thomas N.	Westwood, Mass.
Perrin, John	480 South Orange Grove Avenue, Pasadena, Calif.
Perry, E. R.	Pocantico Hills, N. Y.
Perry, Mrs. William A.	7 East 56th Street
Peters, William R.	55 John Street
Peterson, J.	50 Union Square North
Pettitt, Franklin	2 Wall Street
Phelps, Ansel	29 Wall Street
Phelps, Mrs. Marion von R.	70 West 49th Street
Philips, Frederic D.	15 William Street
Phillips, Louis S.	49 Broadway
Phoenix, Lloyd	21 East 33rd Street
Pickett, William P.	215 Montague Street, Brooklyn, N. Y.
Pickhardt, Carl	1042 Madison Avenue
Pierce, Winslow S.	115 Broadway
Pierson, Lewis E.	Irving Exchange National Bank
Pilat, Oliver I.	562 West 183rd Street
* Pinchot, Amos R. E.	60 Broadway
Pingrey, Darius H.	Bloomington, Ill.
Pinkus, Frederick S.	103 Franklin Street
Pinney, Miss Elizabeth	Dongan Hills, S. I.
Place, Ira A.	Grand Central Station
Platt, Edward T.	205 West 57th Street
Platt, Mrs. Frank H.	242 West 74th Street
Plaut, Albert	120 William Street
Plaut, Joseph	120 William Street
* Plimpton, George A.	70 Fifth Avenue
Polk, H. H.	3700 Grand Avenue, Des Moines, Ia.
Polk, William M.	7 East 36th Street

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Pollak, Francis D.	49 Wall Street
Pollock, J. S.	606 West 2d Street, Little Rock, Ark.
Pompan, Maurice A.	203 Broadway
Pond, Oscar L.	1109-12 Law Building, Indianapolis, Ind.
Pool, Solomon C.	313 West 57th Street
Poor, Ruel W.	200 Fifth Avenue
Porras, Belisario	Panama, Panama
Porter, William H.	23 Wall Street
Post, Abram S.	81 Fulton Street
Post, James H.	129 Front Street
Potter, Mrs. Blanche	180 West 59th Street
Potter, Frederick	71 Broadway
Potter, Mrs. Gilbert	239 East 60th Street
Potter, William P.	Room 458, City Hall, Philadelphia, Pa.
Pound, Roscoe	Harvard Law School, Cambridge, Mass.
Powell, Mrs. Alma Webster	915 President Street, Brooklyn, N. Y.
Powell, Lyman P.	Hobart College, Geneva, N. Y.
Powell, Omar	206 Broadway
Powell, R. J.	634 Security Bank, Minneapolis, Minn.
* Powell, Thomas Reed	Columbia University
Powell, William H.	1170 Broadway
Pratt, Mrs. Herbert	213 Clinton Avenue, Clinton, N. Y.
Pratt, Mrs. John T.	11 East 61st Street
Prendergast, E. A.	Northwestern Telephone Exchange Co., Minneapolis, Minn.
Prentice, Ezra P.	32 Nassau Street
Prescott, Arthur T.	739 North Street, Baton Rouge, La.
Preston, Harold	605 Lowman Building, Seattle, Wash.
Price, Albert S.	310 Lake View Avenue, Jamestown, N. Y.
Price, Theodore H.	24 South William Street
Prim, C. A.	Banifay, Holmes County, Fla.
Prince, John D.	Sterlington, Rockland County, N. Y.
Prince, Theodore	20 Broad Street
Proctor, Mrs. Charles E.	Great Neck, L. I.
Prosser, Seward	389 Fifth Avenue
Prout, Henry G.	30 Church Street
Pruyn, Robert C.	60 State Street, Albany, N. Y.
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Puffer, W. M.	Kalamazoo, Mich.
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Pulitzer, Ralph	17 East 73d Street
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Quackenbush, James L.	362 Riverside Drive
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Reed, Frederic H.	120 Riverside Drive
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Oregon Library	Salem, Ore.
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Public Library	Cincinnati, O.
Public Library (Reference Department)	1375 Euclid Avenue, Cleveland, O.
Rhode Island State Library	Providence, R. I.
Seattle Public Library	..Seattle, Wash.
Social Law Library	Boston, Mass.
Splane Co., Messrs. J. G.	Commonwealth Building, Pittsburgh, Pa.
St. Joseph Free Jublic Library	St. Joseph, Mo.
St. Louis Public Library	St. Louis, Mo.
St. Paul Public Library	St. Paul, Minn.
San Francisco Law Library	805 Grand Building, San Francisco, Calif.
Spokane Public Library	Spokane, Wash.
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EDITOR'S NOTE

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INTRODUCTION

THE essays which are here collected and published in book form not only are valuable in themselves but form a landmark in the history of American contributions to the banking problem. It is in a general way known to the public that Mr. Warburg was in some way connected with the passage of the Federal Reserve Act, and his appointment to his present responsible position on the Federal Reserve Board was acclaimed on all sides with a rare degree of approval and congratulation; but I fancy that it is known only to a very few exactly how great is the indebtedness of the United States to Mr. Warburg. For it may be stated without fear of contradiction that in its fundamental features the Federal Reserve Act is the work of Mr. Warburg more than of any other man in the country.

Up to a very few years ago, virtually all the efforts of the banking reformers in this country were directed to securing what was called elasticity of the currency, through the abolition of the bond reserve for bank-note circulation. Neither the report of the Indianapolis Monetary Conference nor the schemes of the committee of the New York Chamber of Commerce a decade later attempted to do anything more than that; and no single plan seemed to approve itself to the country. The two new ideas which were injected into the discussion by Mr. Warburg were, first, the shifting of the emphasis from the currency problem to the reserve problem, and second, the advocacy of the principle of rediscounting a new kind of commercial paper.

The first point is fully explained in the essay on the United Reserve Bank of the United States. Mr. Warburg recalled to our mind what had been forgotten by most of us, that the real pith of modern banking is the question of the reserve, and that the essential weakness of the American system was the extreme decentralization of resources, resulting in the time of stress or trouble in every individual bank attempting to secure its own

solvency in disregard either of the welfare of other banks or of the needs of the business community. In essay after essay Mr. Warburg hammered on this one idea until he got it firmly fixed in the opinion, first of the experts and then of the general public. Without some method of combining the scattered resources of the individual banks it was clear that no essential progress could be made.

The second point was equally new to the American public, although, like the first, it was a familiar achievement of modern banking reform abroad. Mr. Warburg pointed out that the absence of proper two-name commercial paper and the non-existence of any central bank or banks at which such paper could be instantly rediscounted for cash, compelled the banks either to invest their money in illiquid securities or to loan the funds on the stock exchange, thus producing the remarkable variations in the money rate and bringing about the periodical stringency in the money market. After his lucid exposition of what might be accomplished by a rediscounting and thus introducing into the United States the so-called discount policy of European countries, it was gradually realized that this was the second essential feature of banking reform.

Mr. Warburg also called attention to the advantages of a new currency not based upon the deposit of government bonds, but he made it clear that this reform, which was the sole objective of all previous schemes, was of only minor importance and that it would follow as a necessary consequence from the adoption of the two fundamental points mentioned above. These two principles form the real backbone of the new Federal Reserve Law. When the Aldrich commission was appointed it was not long before Senator Aldrich—to his credit be it said—was won over by Mr. Warburg to the adoption of these two fundamental features. The Aldrich bill differed in some important particulars from the present law. It went further in the direction of centralization and it involved less control by the government of banking operations. The new act is in some details superior to the Aldrich bill; in others inferior. The concession in the shape of the twelve regional reserve banks that had to be made for political reasons is, in the opinion of Mr. Warburg as well

as of the writer of this introduction, a mistake; for it will probably, to some extent at least, weaken the good results which would otherwise have followed. On the other hand, the existence of the Federal Reserve Board creates, in everything but in name, a real central bank; and it depends largely upon the wisdom with which the board exercises its great powers as to whether we shall be able to secure most of the advantages of a central bank without any of its dangers.

In many minor respects also the Federal Reserve Act differs from the Aldrich bill; but in the two fundamentals of combined reserves and of a discount policy, the Federal Reserve Act has frankly accepted the principles of the Aldrich bill; and these principles, as has been stated, were the creation of Mr. Warburg and of Mr. Warburg alone.

It is this fact which gives especial interest to the present collection of essays which are printed just as they were originally published and which show the gradual development, in unimportant points, of Mr. Warburg's thought. In weighing the merits of these essays it must not be forgotten that Mr. Warburg had a practical object in view. In formulating his plans and in advancing slightly varying suggestions from time to time, it was incumbent on him continually to remember that the education of the country must be gradual, and that a large part of the task was to break down prejudices and remove suspicions. His plans therefore contain all sorts of elaborate suggestions designed to guard the public against fancied dangers and to persuade the country that the general scheme was at all practicable. It was the hope of Mr. Warburg that with the lapse of time it may be possible to eliminate from the law not a few clauses which were inserted, largely at his suggestion, for educational purposes.

As it was my privilege to say to President Wilson when originally urging the appointment of Mr. Warburg on the Federal Reserve Board, at a time when the political prejudice against New York bankers ran very high, England also, three-quarters of a century ago, had a practical banker who was virtually responsible for the ideas contained in Peel's bank act of 1840. Mr. Samuel Jones Lloyd was honored as a consequence by the

British government and was made Lord Overstone. The United States was equally fortunate in having with it a Lord Overstone. And while it is not the custom for America to confer peerages upon its distinguished citizens, it is fortunately beginning to become the practise to induce them to accept positions of great public responsibility in which they can at once serve the community and honor themselves.

It is my especial pleasure to be able to write these few words of introduction, because it was in my study that Mr. Warburg first conceived the idea of presenting his views to the public. When he began to chat familiarly on the subject he at once impressed his listeners by the importance and novelty of his views. His modesty and his shrinking from public controversy were so pronounced that it was only with the greatest difficulty that he was persuaded to put his ideas on paper. But having once set out on the task, there was no stopping, and from year to year essay upon essay flowed from his facile pen, giving more precision and point to his fundamental principles, until he was recognized as the real leader in the new movement. The Federal Reserve Act will be associated in history with the name of Paul M. Warburg, and the Academy of Political Science deem it a rare privilege to be able to present to the public this volume of his collected essays.

EDWIN R. A. SELIGMAN.

LAKE PLACID, NEW YORK, August, 1914.

DEFECTS AND NEEDS OF OUR BANKING SYSTEM

THE question of the reform of the currency system is uppermost in the minds of all, not only in our own country, but in Europe as well; for Europe also is vitally interested in the problem. So much has been said and written on this subject that it is almost a presumption to seek to add any new thoughts. There is, however, one point which has not as yet been sufficiently emphasized, but which appears to lie at the very root of the problem. This is the question of our commercial paper.

It is a strange fact that, while in the development of all other commercial phenomena the United States has been foremost, the country should have progressed to so slight an extent in the form of its commercial paper. The United States is in fact at about the same point that had been reached by Europe at the time of the Medicis, and by Asia, in all likelihood, at the time of Hammurabi. Most of the paper taken by the American banks still consists of simple promissory notes, which rest only on the credit of the merchant who makes the notes, and which are kept until maturity by the bank or corporation that discounts them. If rediscounted at all, they are generally passed on without indorsement, and the possibility of selling any note depends on the chance of finding another bank which may be willing to give the credit. The consequence is that, while in Europe the liquid assets of the banks consist chiefly of bills receivable, long and short, which thus constitute their quickest assets, the American bank capital invested in commercial notes is virtually immobilized.

In Europe—as for instance in England, France, or Germany—there are scores of banks and private banking firms which give their three-months' acceptance for the commercial requirements of trade, or which make it their specific business to indorse commercial bills. A commercial borrower in these countries who does not get a cash advance will do one of two

things. He will either sell to his bank or his broker his own three-months' bill drawn on a banking firm willing to give him this credit, or he will sell the bills drawn by him on his customer (in payment for goods sold to them), which bills will be subsequently passed on with the indorsement of the banker. This banker's acceptance, or this indorsed paper, can be readily negotiated by the buyer at any time whenever there is a profit to be derived, or whenever the holder desires to realize on the bill. The holder will always be able to dispose of it, either through private discounting or, in case of need, by selling, as the case may be, to the Bank of England, the Banque de France, or the German Reichsbank. In any event, the firm or corporation which buys this paper can secure its equivalent at any time. The quality of the bills, assured by the established credit of the acceptor or by the various indorsements on the bill, is such as practically to eliminate the question of credit, and the conditions of the sale will depend only on the rate of interest.

The value of the existence of thousands of millions of such standard paper, as it is found in all the important European financial centres, can scarcely be sufficiently emphasized. Just as the check system is a method of clearing bank cash credits, thus helping largely to prevent unnecessary absorption of the currency, so modern commercial paper, through the additional safety which is secured by the banker's indorsement, acts in like manner as a clearing of credits on time not only within the community, but, what is just as important, among the various nations as well.

If money tightens in Europe, let us say in Germany, France and England will immediately invest in German bills. They could not buy the paper of individual German merchants, whom they do not know, but they do and must know the value of the acceptance or indorsements of the German banks which offer and indorse or accept this paper. By a well organized system of such bills of exchange the credit of the whole nation —that is, of the farmer, merchant, and manufacturer—is joined to that of the banker and becomes available as a means of exchange both within and without the country.

Under present conditions in the United States, on the other hand, instead of sending an army, we send each soldier to fight alone. With us the borrower receives money from the bank and his note becomes an illiquid asset in the bank's portfolio. If the bank desires to raise money, it must use its own credit, instead of adding its own credit to that of the borrower, thus making the dead note a live instrument of exchange. The only modern bills in our country are the so-called "foreign exchange" bills, drawn on European banks and bankers, which are indorsed and which always have a ready market.

But what an anomalous position! Instead of having the credit of the entire country available in the shape of millions upon millions of modern paper which Europe might and would buy, we must rely on the willingness and the ability of a few banks and bankers to use their own credit by drawing their own long bills on Europe. This is a costly and most unscientific mode of procedure, which is in no way adequate to the necessities of the situation. For there is, as a matter of course, a limit to the amount which the American banker can draw and which the European banker will and can accept.

Recent events have shown the inefficiency of this system. In spite of unwise provocation the government banks of Europe would not and could not have made a stand against us (as they have done during these past few months by raising their rates of discount and by discriminating against our so-called finance paper) had we been able to send our legitimate commercial paper instead of forcing the banks and bankers to draw their own bills. These bills, it is true, indirectly help commerce, for a bank which requires money in order to accommodate its merchant customers will call its stock-exchange loans, while bills drawn against stock-exchange collateral will in turn provide the money that has thus been called.

But such bills must inevitably bear a financial character, and will not be regarded so favorably as commercial paper would be. Moreover, since the drawers and, to an even greater extent, the European acceptors, are comparatively few, the European banks must at times feel that they are getting too large an amount of paper drawn on and indorsed by the same

firms. As these bills, drawn, as the case may be, in pounds, francs, or marks, sell normally at the same rate of private discount as all the other long bills in the country, the European banks find no particular inducement to purchase them. When, therefore, there is an excessive amount of these American bills offered, the consequence is discrimination, and, what is worse—owing to the financial aspect of the bills—a feeling of uneasiness and distrust.

If instead of this unfortunate method of financing we could offer American paper drawn in dollars, showing its commercial origin and indorsed by and drawn on American banks or banking firms, we should vastly multiply the avenues leading into the portfolios of the European banks, and our bills would be well spread instead of going into a few channels which can so easily be closed. We should create a new and most powerful medium of international exchange—a new defense against gold shipments. This is no visionary theory. In view of the fact that a great many millions of even Russian bills are constantly held by French, English, and German banks, institutions and capitalists, there is no reason whatsoever to doubt that these same avenues could be readily opened to American paper.

In order thus to make our paper part and parcel of the means of the world's international exchange, it needs, however, as a preliminary condition, to become the foundation on which our own financial edifice is erected. It must always have a ready home market, where it can be rediscounted at any moment. This is insured in nearly every country of the world claiming a modern financial organization, by the existence of some kind of a central bank, ready at all times to rediscount the legitimate paper of the general banks. Not only England, France, and Germany have adopted such a system, but all the minor European states as well—and even reactionary Russia—have gradually accepted it. In fact, Japan without such an organization could not have weathered the storm through which she has recently passed, and could not have achieved the commercial success which she now enjoys.

Our methods are just the reverse of the European system.

With us call money does not go into the bill market. Every American bank, since it cannot count on reselling the notes which it buys, must necessarily limit the amount which it can properly invest in American paper, and as a consequence almost all the call money is invested in demand loans on the stock exchange. The result of this is that the overflow of money of the entire country, from the Atlantic to the Pacific, is thrown into the stock exchange, making stock-exchange money easy and stimulating speculation when trade is relaxing, while on the other hand, as soon as demand for money for commerce and industry increases, the funds to provide for the needs of the whole country are called from the stock exchange, causing a disturbance there.

Our whole elasticity is built up on the bond and stock market. Banks can issue notes on government bonds, and call money is kept in stock-exchange loans. In Europe the situation is reversed; banks issue notes primarily against their purchases of bills of exchange, and the reserves of the country are kept primarily in bills of exchange.

In Europe banks and bankers invest against their deposits chiefly in bills of exchange, short and long, and only to a comparatively small extent in fortnightly or monthly settlement money on the stock exchange or in call loans on stock-exchange collateral. If call money becomes easier, it is in the first instance the rate for short and long bills that goes down, and since this rate is practically the same all over the country, a withdrawal or an influx of money, instead of being felt primarily by the stock exchange, is borne equally by thousands of millions, the grand total of all money invested in such bills being a great many times larger than the comparatively small amount employed in stock-exchange loans. It is like throwing a pebble into a pond; the ripples will slowly spread in concentric circles, until in the end they are scarcely perceptible. With us it is like casting a stone into a small basin; the entire surface is suddenly and violently agitated for a short time.

To explain briefly the workings of a European central bank, to show how little political power need attach to it and how little it interferes and need interfere with the business of the

general banks (except to act as a general brake on the market, if it over-extends, and to provide for the needs of the country, as long as they are legitimate) it may be well to say a few words about the German Reichsbank, admittedly the most perfect organization of its kind.

The capital stock of the German Reichsbank is owned partly by the government and partly by the public. The Reichsbank has a central board in Berlin, consisting of the foremost men in financial and commercial circles. The president of the bank is a salaried officer, a trained banker (no politician) who retains his position irrespective of the party in power, like the president of any private bank who remains in office as long as he does his work well. The Reichsbank has its branches in every important town similar to our central reserve and reserve cities. Each branch has its own board of directors, consisting of ten or twenty men, representing the best financial and commercial men in the locality, while each branch has its own salaried president, responsible to the board. The chief duty of the bank, leaving all other details not bearing upon our subject aside, is to buy at the published bank rate legitimate paper, which must bear the acceptance or indorsement of at least two well-known banks or bankers. This bars the Reichsbank from doing a general commercial business, and converts it practically into a bank for the other banks.

Moreover, the published rate of the Reichsbank is, as a rule, from ½ of 1% to 1% higher than the private discount rate at which the other banks buy paper. Since, however, the central bank has branches in every town, the banks use it chiefly in the normal course of events for the collection of bills throughout the entire country as they fall due. The bank has its established rules for such collections, deducting at its published rate from five to ten days' interest, according to the distance of the towns on which the bills are drawn, but not charging any commission.

According to this system, for instance, a Hamburg bank, owning a bill on Munich, would sell the bill to the Reichsbank five days before it falls due, simply rediscounting the last five days at the bank rate. A Munich bank having a bill on

a Hamburg bank would do the same, both getting the money immediately, while the Reichsbank, as the general clearing house, would simply transfer on its books the credits of the one branch to those of the other. Through a system of this kind it is possible to avoid the constant remittance of cash and the locking up of money by the banks. The advantages that a system of this kind would bring to the United States are obvious.

When money tightens in Germany the banks rediscount through the Reichsbank their short bills which have a little more than five days to run, and as the private discount rate throughout the country rises, the bills that the banks rediscount will gradually be longer and longer. While this process is in progress, the private discount rate and the bank rate will be approaching each other. If rates are comparatively low, the general tendency of the Reichsbank will be to advance its rate, so as not to be forced to put out too large an amount of notes issued in payment for the bills. For, as is well known, the bank is compelled to pay a tax when its note circulation exceeds a certain limit. After a normal amount of its notes is out, the Reichsbank will, therefore, tend to keep its rate well above that of the ordinary banks until the rate of interest received in discounting paper is high enough to indemnify the Reichsbank for the payment of the tax.

As a consequence the Reichsbank, as a rule, keeps its rate high enough to leave to the ordinary banks the general business and the fixing of the rates at which this business is conducted. By raising or lowering its rate, however, the Reichsbank indicates the general trend and exerts a moral and practical influence on the tendency of the banks to extend or to restrict business. If money is low in Germany and high in other countries, with a natural consequence that German capital would leave the country, and gold as a result be exported, the Reichsbank will work for a higher rate of interest as a precautionary measure, and the general banks will, as a rule, follow the Reichsbank's lead.

In the opposite case, however, when money is becoming very scarce in Germany, there is no fear at any time of a money

squeeze, as the Reichsbank, on paying the tax, can issue a virtually unlimited amount of notes as long as safe and legitimate paper is offered for discount. In times of very high money the Reichsbank will at a certain point cease to keep its own rate above the private discount rate of the banks, and at such times the ordinary banks will often rediscount with the Reichsbank not only the short bills, but even the long ones. Thus the duties of the Reichsbank are, on the one hand, to counteract the influence of too abundant a money supply, and on the other hand, to furnish at legitimate rates all the money that the country legitimately may require.

It should be added here that the Reichsbank also makes loans on collateral. There is, however, a fixed rate for this, namely, 1% above the bank rate. This is, as a rule, a much higher rate than that at which the general banks will furnish the money, and in addition there exist very strict regulations as to the kind of securities on which the Reichsbank is permitted to advance money and as to the percentage of the market value of the securities which it may loan. Since these rules are much more rigid than those of the general banks, nobody would under normal circumstances apply to the Reichsbank for a loan on collateral. When money becomes scarce, however, the banks or the bankers can always count on the Reichsbank to fall back upon, and in case of a crisis this is readily done.

The ability of the Reichsbank to advance against securities is, however, of minor importance as compared with the fact that the existence of such an institution forms the foundation on which is erected the whole system of financing the business interests of the empire on bills; for this results in an elastic system, expanding and contracting, according to the requirements of trade and industry.

Reason, as well as the experience of all other nations, tells us that we in the United States should attempt to reorganize our present system of issuing and handling commercial bills, in order to create the basis necessary for a modern system of currency and finance. Not only, however, should we endeavor to make such bills the medium of equalizing the daily demand

for and supply of money, but we should also by all means try to break with the other system, which makes call loans on stock-exchange collateral serve for this purpose.

Let us next consider another point of some importance. The principal stock exchanges in Europe have their dealings for fortnightly or monthly settlements, while on the New York stock exchange all transaction are for daily cash settlements. The advantages of the European system are obvious; it avoids unnecessary duplication of work and unnecessary outlay of money, and it assures a greater stability.

In Europe the "positions" are "carried" from one settlement to the next; that is to say, the broker borrows or lends the money from the end or the middle of the month to the next settlement day at a rate of interest agreed upon in advance. Unlike his unfortunate New York brother, he need not find his money from day to day, and he need not fear that money rates will jump from 4% to 100%, or that, even at such rates, he may not be able to secure the money at all.

In Europe the amount employed on the stock exchange is a fairly constant one. The daily plus and minus of the demand for or the supply of money is adjusted in the bill market, and if more money is required on settlement days and the rate of settlement money rises, the normal consequence is that more money will go from the bill market to the stock exchange, and be employed there until the next settlement. This process takes place year in and year out practically without any serious disturbances; fluctuations and exorbitant money rates such as we have so frequently witnessed in this country are not only unheard of, but absolutely inconceivable in Europe. From settlement to settlement in Europe the broker and the customer are safe; the stock-exchange loans remain unchanged.

If such a system of settlements should be established on the New York stock exchange—for which case it would be advisable, in order not to stimulate gambling, to provide in some way for putting up margins to protect the contracts—several objects would be achieved. In the first place, individuals would be in a position to secure money for a reasonable time and at reasonable rates, and panicky fluctuations, so frequent

at present, would become rare. Secondly, the regulation of the daily supply and demand of money would be forced from the stock exchange into the bill market.

It should be added here that our present system of cash dealings on the stock exchange is forced upon us as the result of the unreasonable usury law of the state of New York, which, although making it unlawful to take more than 6% on time loans, is in reality the direct cause of an almost confiscatory rate being charged from day to day for weeks at a time.

That the usury law should provide a maximum rate for pawn shops or for small individual loans is defensible, but for large business transactions most of the European laws do not limit the rate. Even in those countries which still retain some form of usury laws, in order to constitute usury it must be proved that the party taking the money was in dire stress and that the party loaning the money designedly took advantage of the debtor's helpless position to exact an exorbitant rate. If the hight of the rate is to be the deciding factor in judging whether usury has been exacted, the law ought to state the maximum amount permissible in excess of the ruling interest rate of the country (like, *e. g.*, the bank rate abroad).

But for the large transactions of a country one fixed maximum rate cannot be laid down by law. It is preposterous to extend such a principle to the business of large solvent houses, and to prevent them from making a legally binding contract for time money at more than 6% in the face of the fact that such a loan at 7% or even 8% might be of the greatest benefit to them, while the impossibility of securing money except on call at ridiculous rates might cause the most severe loss of money and of business. Conditions like the present show the absurdity of such a system; when money in Europe is worth more than 6% on time—as happens to be the case just at present—the consequences can only be that under present circumstances some people will loan at more than 6% on time, and take the risk of such illegal action. As there are, however, comparatively few, the call rate must rise to such an abnormal hight as is necessary to keep money from going abroad or to attract a new supply to our country. But as this exorbitant

rate for call loans may break from day to day, in consideration of the resulting risk of exchange connected with the transaction, one might say that the rate for short money, in order to attract foreign capital, will rise about 10% to 20%, where the rate for time money would have to rise only 1%.

With no modern paper to offer, with the usury law limiting the legal time rate to 6%, and with an unwritten law, observed by many banks, not to charge their regular customers more than 6%, even on call loans, our only primitive means of protecting the country are either an immense rate for call loans in the open market or a violent break in the price of our securities, as a rule the consequence of such shortage of money. This break must bring our securities down to a level where Europe will buy, and ultimately results in a relief of our money market by reason of remittances from abroad for such purchases.

Such are the consequences of the perpetuation of an absurd system which has been abandoned everywhere else. Banks and bankers may by manipulation sometimes exaggerate the disgraceful conditions which exist in our money market, but the direct cause is our present system, which makes these occurrences, as it has been endeavored to make clear, absolutely inevitable.

Our immense national resources have enabled us to live and prosper in spite of our present system, but so long as it is not thoroughly reformed it will prevent us from ever becoming the financial centre of the world. As it is, our wealth makes us an important but dangerous factor in the world's financial community, with immense resources indeed, but without a central organization of our own, using and sometimes abusing the financial organization of Europe in order to atone for our own shortcomings; unable effectively to put on the brakes ourselves, we compel the government banks of Europe to take measures for the regulation of our own household.

In closing, a few words may be said about the propositions now before the country with reference to currency reform. At the outset we were between Scylla and Charybdis; on the one hand the tendency to give unlimited power to the Secretary of the Treasury—a political officer, possibly untrained in

the banking business and one who, although probably in most cases unselfish and wise, may also be selfish and unwise; and on the other hand the movement of the bankers' association to take all power from the treasury, forcing it to put out its money at a fixed rate and practically vesting its power in the national banks. The one tendency appears to be as bad as the other; it is dangerous to give so much power to one individual who is not in business, but it is equally dangerous to give so much power to men who are all in business. The bills recently introduced in Congress show a material improvement on these first attempts.

The one bill, known as the Elkins bill, which empowers the Secretary of the Treasury to deposit with the national banks against collateral all moneys received—including custom-house revenues—leaving the rate of interest, however, to be fixed in his discretion, deserves unqualified indorsement. It leaves a vast discretionary power with the Secretary, but this is a necessary evil as long as we have no central bank. To make the treasury an automatic institution and practically to transfer its powers to the national banks would be worse; for it is impossible to see how any concerted action could be taken by these banks to protect the country (as a central government bank would do by increasing the rate of interest or by supplying money at moderate rates) if such a course proved to be contrary to their interest. They are, after all, money-making concerns—not public institutions—keenly competing against one another, and they cannot be forced to coöperate in any way that may injure their own business. There must be some power capable of taking an unselfish and larger point of view, for otherwise the country would be without any financial protection whatsoever. This function must be left for the time being to the treasury, which, by increasing or decreasing the rate at which it deposits the government funds in the banks, can put on the brake to a certain extent and thus protect the country and its gold.

It is to be feared that any scheme which attempts to establish a concentration of control of note issue by the national banks and to create a joint guarantee of such notes will fail

of adoption or will not work, in the long run, for the reason that each individual bank will be unwilling to submit to control or interference, and that the conservative banks will sooner or later feel that they are shouldering the burden for the less careful sister institution, which, if it fails, would inflict losses, to be borne by the joint guarantee fund contributed by all the banks.

The second bill which has been introduced meanwhile is the bill of the House committee on banking and currency, which urges that authorization be given to any national bank to issue unsecured notes to the extent of 25% of its capital, on paying a tax of 3%, and an additional 12½% on paying a tax of 5%. This bill is undoubtedly an improvement on the proposition of the bankers' association, as through the higher tax there is more probability that the notes would be redeemed from time to time, since it would pay the banks to keep even the lower-taxed notes in circulation only as long as money is worth at least 4½%. The rising scale, however, previously recommended by the chamber of commerce appears to be the safer plan, as with the almost stationary rate of 6% for commercial paper, some of the country banks might otherwise be tempted to keep the lower-taxed notes outstanding nearly all the time. This, instead of elastic circulation, would mean increased circulation, which is not needed. But the chief objection to this bill and all similar recommendations is that it is a wrong principle to allow any bank giving unsecured commercial credits to issue unsecured notes. Besides, if a bank is allowed to issue, as a net result, about 28% (37% less the 25% reserve) of its capital in unsecured notes, does it not simply mean that the bank, on paying a certain tax, may infringe upon its reserve to this extent? Should we not through such a measure place our national banks on a less conservative basis than they were heretofore, when they were not allowed to issue unsecured notes? Undoubtedly our system would gain in elasticity, and the guarantee fund might grow to take care of the notes of many a bank that might fail, perhaps just in consequence of the greater latitude offered to it by the present bills, but the principle remains bad all the same.

I strongly believe that banks issuing unsecured notes which are to pass as the people's money should be restricted to buying paper that is endorsed by other banks or banking firms, and that they should be restricted also as to the kinds of loans to be made by them; in short, they should not be allowed to take the same risks as every general bank or banking firm.

To meet, however, the needs of the hour it might be advisable to authorize the banks to issue notes, on paying a tax as proposed by this bill, but to secure these notes by a deposit of paper bearing at least three *bona-fide* signatures, of which at least two would have to be those of banks or bankers.

This course would commend itself for several reasons.

1. It is more conservative and would make the banks and the notes safer.

2. It would force the banks to apply the money to be received from additional circulation to the purchase of commercial bills; it would prevent the money from being used directly for stock-exchange loans, as it could be under the present bill.

3. It would further the creation of modern paper, since, if such a law were enacted, modern paper which could be deposited would be taken in preference by the banks.

4. Certain committees would have to be appointed in every reserve and central reserve city in order to scrutinize the bills deposited as security by the banks. These committees might be the predecessors of future local committees of a central organization.

5. We should lay the foundation to modernize our financial structure, a foundation that would carry in itself the elements of a central system built up on the trade, commerce and industry of the country, an end which at present is far out of our reach.

The scope of the issue of secured notes can be safely enlarged from time to time, especially since a guarantee fund of secured notes would grow rapidly with comparatively few losses, while the bill of the House committee would be limited in its scope, and would be only a makeshift, endangering the safety and soundness of our currency.

Whether a centıal bank will be eventually owned by the

national banks is impossible to foretell, nor can it be predicted whether the business of accepting and rediscounting will become the domain of the trust companies and the general banks, or whether new discount companies, like those in England, will be started for this purpose. It is, however, not beyond the bounds of imagination that a wholesome line of demarcation between the business of national banks and that of other financial institutions might gradually be reëstablished through such a development. Such paper could eventually be admitted also as collateral against the deposits of treasury money.

That a central bank is the ideal solution of the difficulty and that it must finally come—though, perhaps, we may not live to see it—is my firm belief. None of the reasons advanced against it are tenable.

It has been argued that a central bank would be dangerous, as, in fact, it was in the past, because it might become the tool of politicians, and it has been frequently stated that " we do not want politics in business." But the powers which the Secretary of the Treasury, a political officer, must exercise now are much vaster than those that any single officer of a central bank would ever enjoy, and these officers could be appointed in such a way—for instance in part by the government, by the national banks, by the courts, by the chambers of commerce—that the constitution of the board would be taken entirely out of politics. Are we not unduly depreciating ourselves by saying that we should not be able to find a set of business men of sufficiently high standing to form the central and local boards of such a central bank, and that we could not secure salaried officers competent to fill the post of managers of the central bank and of the branch offices?

I think that we are greatly mistaken if we believe our country so entirely different from all others that we should be obliged to continue to do the opposite of what is done by them, while the system of all other important nations has proved to be excellent, and ours has proved to be defective.

We have reached a point in our financial development where it is absolutely necessary that something be done to remedy the evils from which we are suffering, and it would be a thou-

sand pities if our legislative bodies did not meet the situation. Let us, however, be careful clearly to recognize the cause of the evil before we act, so that we may not be found repairing the roof while the foundation is rotten.

Meanwhile there remains important work to be done by the banking community itself, without any aid from Washington. At present our bankers look with scorn on rediscounting and accepting American bills. They should recognize the fact that these two branches of business are not only most legitimate, but most necessary for the nation's development.

A PLAN FOR A MODIFIED CENTRAL BANK

THE appalling panic which we have experienced during the last few weeks will do more, I suppose, to bring home to the public the absolute necessity of a change in our present banking and currency system than all the efforts that have hitherto been made to warn the nation of the imminent danger. It is to be expected that Congress will take some action on this question at its next session, but it is sincerely to be hoped that it will not follow the line of least resistance by adopting some paltry palliative, but that the question will be approached in a bold and broad spirit.

As I tried to prove in a previous paper on "Defects and Needs of Our Banking System," which *The New York Times* published in its Financial Supplement in January last, nothing short of a modern central bank will effect a final solution of the problem, but, as was also indicated in that paper, we are still so far removed from the fundamental conditions which would have to be created in order successfully to establish a central bank on the European basis that the attempt to take so far-reaching a step would involve material and harmful delay.

There are grave objections, however, to the scheme, advocated by so many, of creating an emergency currency by permitting each national bank independently to issue unsecured notes up to a certain percentage of its share capital, subject to a tax sufficiently heavy to insure the prompt withdrawal of these notes when times again become normal. If issued individually by each national bank, without a joint guarantee by all the national banks, such notes would add a new element of danger in times of panic.

Let us imagine what would have happened during the last few weeks when one of the national banks became somewhat involved, if notes of this kind had been outstanding. It stands to reason that the panic which caused a run of the depositors

would have been carried into the ranks of the noteholders, and it might easily have intensified the distress by creating a general lack of confidence and wholesale discrimination against national bank notes, thus aggravating the general hysteria and increasing the withdrawal and hoarding of legal-tender currency as well as gold. It is, moreover, not at all improbable that the emergency notes of this bank and those of a majority of the other banks would have been in circulation before the real pinch came, as a great many people thought that the culminating point had been reached when, as a matter of fact, the crisis was only beginning.

Further, it is bad practise to allow a bank to issue unsecured notes, which are to pass as current money, against investments in single-name commercial paper or against loans of all kinds, as, for instance, in this case, on inflated copper and bank stocks. No European central bank would be allowed to proceed in this way. There are strict regulations as to the loans which these note-issuing banks are permitted to make; and as to their purchases of commercial paper additional guarantees (generally three good signatures) are required.

It is very doubtful whether the stronger national banks would consent to a joint guarantee by all the national banks for the entire amount of unsecured notes issued by the national banks. This could be done safely only if they could exercise a material control over their sister banks.

As a way out of the difficulty, the following plan is suggested—a plan which does not purport to cover the situation fully, but embodies a general sketch of what might possibly be tried. The scheme adopts some of the good features of the European system, while it seeks to avoid those parts of the European machinery which could not well be adapted to our present conditions.

It is proposed to create at Washington a bank, to be called hereafter the Government Bank, endowed with a capital of from $50,000,000 to $100,000,000, possibly paid up only in part, the share capital to be owned, if feasible, half by the government and half by the national banks, and the management to be in the hands of a salaried president or presidents, who

are to be appointed for an indefinite period by the board of directors. The board of directors is to consist of delegates of the various clearing houses of the central reserve and reserve cities; the Secretary of the Treasury and the controller of the currency are to be members *ex officio,* and some additional directors are to be appointed by the stockholders, by the Supreme Court, and by the chambers of commerce of, let us say, New York, Boston, Philadelphia, and Chicago.

This is only a rough outline, susceptible of easy modification, intended merely to show how it is possible to create a board which would be independent of politics, which would comprise men of business knowledge and experience, and which, by its composition, would afford a reasonable guarantee that it would not be swayed by selfish motives in its actions.

The Government Bank would receive the treasury's moneys, and the deposits of these moneys with the national banks would in turn be made by this bank. The Government Bank would have the right to issue legal-tender notes, not to exceed a certain multiple of its capital and its holdings of gold or of gold notes. The bank would, in the main, be limited to transactions with the clearing houses of the various cities of the United States and with the clearing-house members.

The Government Bank would be allowed to deposit moneys with the clearing-house institutions and national banks in the country against collateral, taking United States government securities at 90% of their market value, municipal securities at 80% of their market value, and railroad bonds at 60% of their market value. (The percentages above given are again only illustrative of the way in which government moneys, through the medium of the government bank, could safely be put out against good securities on a plan similar to the European mode of handling government moneys.)

The bank would establish a general rate of interest for such deposits, such rate to be modified from time to time, very much as is done under like circumstances by the European government banks.

The bank would be allowed to advance money against

clearing-house certificates of the banks of the central reserve and reserve cities of the United States.

It would further be allowed to buy paper running for a period not to exceed three months, made out in dollars or in sterling, francs, or marks, such paper to be strictly commercial paper and to bear at least three signatures, of which one must be that of a well-known bank, trust company, or banker. The privilege of buying such foreign paper is proposed in order to enable the government bank to accumulate a reserve of long bills having a gold basis, as is done by the European government banks. Such bills would be used to meet and to counteract, as far as possible, demands for gold which might be made upon us from time to time by other countries.

The authority for the government bank to buy three months' dollar paper, also bearing at least three signatures, including a bank's or banker's indorsement or acceptance, is added for the purpose of encouraging the creation of such paper, the lack of which is largely the cause of the immobilization of the resources of our banks.

It would probably suggest itself that a limit be set to notes issued tax-free by the Government Bank, and that a penalty be paid for notes issued in excess of this limit.

The general scheme as roughly outlined above has this advantage, that the control of the clearing houses over the individual banks would be strengthened, while it would, on the contrary, be weakened through the general emergency-currency plan. The clearing house would, as a matter of course, examine the collateral against which a national bank proposed to take out currency from the Government Bank by means of the clearing-house certificate. The clearing house would thus be able, to a certain degree, to prevent the moneys so received from Washington from being used for any but strictly legitimate purposes.

The clearing-house committee would have the right, but not the duty, to issue such certificates, and it could, through this power, hold a check on those institutions which it might regard as not sufficiently conservative. Moreover, the clearing-house committee would pass on the question in general whether

or not it would be well for the community to issue additional currency.

The idea that the issuing of clearing-house certificates in itself implies the existence of a crisis would soon disappear, and before long the general public would be as little excited by it as is the German public when the limit of the amount of notes which may be issued without paying a tax has been reached. The issue of clearing-house certificates would mean, in general, that it is time to go slow, but it would not necessarily imply the imminence of a panic.

The scheme as proposed above would have the further advantage that clearing-house certificates, which now merely allow the banks to draw on their reserves, without increasing the currency, would serve in future as a means of providing additional currency, and while clearing-house certificates now materially increase the difficulty of settling the debits and credits between the various cities, they would, if used in the way proposed above, facilitate the intercourse between the cities. The Government Bank would act as the clearing house for the clearing houses.

It is not beyond the bounds of imagination that local boards for branches of the Government Bank in the various cities could be established, taking the clearing-house committee or some members thereof as a nucleus around which some other independent members might be added. It is also possible that these agencies would receive moneys in one city in order to pay them out in the other, as is done by the Reichsbank of Germany. It is precisely in times of panic, when so much currency is absorbed by unnecessary shipments from one place to another, that it would be a blessing to have a safe mechanism to act as a daily clearing house between the cities.

There are, of course, many sides to this question which need further discussion and elaboration in detail. I have tried, however, to confine myself to the presentation of the rough outlines only of a plan which seeks to avoid all those aspects of a central bank which render it objectionable to many.

In the bank contemplated the composition of its board is a guarantee that we shall not have "politics in business," and

the limitation of its scope of business eliminates all danger of selfish or speculative use of its moneys. At the same time we should be laying a broad foundation on which it may be possible gradually to build a modern financial structure.

This scheme will perhaps meet with opposition from the numerous small country banks which are not members of a clearing house, and which, of course, would prefer that each bank should have the right to issue emergency notes independently for its own account. It is to be hoped that selfish considerations will not prevail in the solution of the problem, which is one of the most serious the country has faced for many years. Moreover, it should not be difficult gradually to work out some device, by means of which each clearing house would be enabled to take care of the banks of the surrounding cities. Above all, even if the scheme embrace for the present only the clearing houses in larger cities, there can be no doubt that it would prevent any recurrence of the present situation, which practically means a temporary suspension of payment all over the country.

We need some centralized power to protect us against others and to protect us from ourselves, some power able to provide for the legitimate needs of the country and able at the same time to apply the brakes when the car is moving too fast. Whatever causes may have precipitated the present crisis, it is certain that they never could have brought about the existing outrageous conditions, which fill us with horror and shame, if we had had a modern banking and currency system.

With our present methods our " elasticity " depends principally on stock-exchange loans, while the most legitimate business, the purchase of commercial paper, causes a dangerous locking up of capital in single-name promissory notes, which under normal conditions cannot be resold.

My previous paper fully explained that this is exactly the opposite of the European and of any modern system and that by modernizing the form of our commercial paper and by creating a central bank we should aim to transform our commercial paper from a non-liquid asset into the quickest asset of our banks. This change, however, is so far-reaching that

it would take years of educational work to carry it out, while relief should come at once.

In creating a central bank with limited powers and in making clearing-house certificates the regular means of rediscounting and of taking out additional currency in times of scarcity of money—not a means to be used only as a last resort in a severe crisis—we should adequately meet the situation. To the single-name paper we should add the guarantee of the joint clearing-house institutions before making it the basis of our current notes, which, with the additional weight of the issuing Government Bank, would form a safe means of elastic circulation, based on the legitimate demands of trade and industry.

Incidentally, we should gradually extend the influence of the clearing houses and the Government Bank, not only over the finances of the whole country in general, but also over individual concerns, against the reckless financial management of which these bodies might feel called upon to discriminate. Instead of giving vast and vaguely defined powers, properly belonging to a central bank, to one or two political officers—possibly without business training—and instead of putting the burden and responsibility on them alone, we should define the power and responsibility clearly and should associate with our political officers in bearing it a large body of our best-trained business men. This would mean a democratic, a conservative, and a modern way of self-government.

AMERICAN AND EUROPEAN BANKING METHODS AND BANK LEGISLATION COMPARED

I

A COMPARISON of European and American banking methods and legislation is so broad a subject that it cannot be fully dealt with in a single address. It will, therefore, be necessary to limit ourselves to the broad outlines of the subject. We shall endeavor to state the general basis of the banking business in Europe and to compare it with our own, and where European methods differ from each other in detail, we shall single out for the purpose of comparison that system which is generally acknowledged to be the most efficient. Furthermore, in speaking of Europe, we shall understand the term to mean primarily the three prominent financial powers,—England, France, and Germany.

Let us begin by establishing the line on which modern banking has developed. From the primitive method of bartering goods for goods, exchange gradually develops to the acceptance of an acknowledged standard or measure, be it the accepted value of an ox, a slave, a woman, a measure of grain, or a certain weight of metal. Those means of exchange which prove the most durable and, at the same time, are the handiest because, being the most precious, they absorb the least space, are finally evolved as the best measures of value. Thus gold and silver of officially certified weight and fineness have developed as the coin and currency of nations. The next evolution is that, instead of accepting and carrying about clumsy masses of metal coins, the owner is satisfied to accept a certificate of ownership of metal—the note. Here we see the first appearance of credit. Credit means, literally, faith; it is faith in the bank or government issuing the paper representing the bullion. We reach a state of modern banking,

however, only when to this credit, which still means payment for each transaction in coin or coin certificate, are finally added other bank credits, which become part and parcel of the banking system. This means that instead of paying by money only, the vast majority of the payments are effected through transfer of credits; it means payment by check. I need not dwell at length on this question of deposits and checks, as it has been fully dealt with in some of the preceding addresses. The check, however, is only one, although a very important one, of the factors that constitute a modern banking system; many other currency-saving devices which prevent the use and absorption of cash have to be added to render the system a perfect one. We must add a modern system of bills of exchange (by which we mean two- or three-months paper drawn on banks or bankers or indorsed by them) well regulated by clear and simple laws. As the check acts as a means of transfer of cash credits from one owner to another, so the transfer of the acceptance of a bank is the transfer of credits on time; it is like the transfer of banks' interest-bearing certificates of deposit on time. We shall have to deal fully with this important question a little later. As parts of a modern banking system we must further add well-organized stock and produce exchanges and clear and simple laws regulating the administration of corporations, and the issue, the transfer, and ownership of securities. All these refinements of our business intercourse, if I may so call them, have the object and effect of minimizing the physical transfers of property, and of reducing to a minimum the dangers of such transfers by establishing well defined and generally accepted laws and regulations governing such transactions, by avoiding unnecessary payments (through clearings), by liquidating whatever balances remain to be settled with the smallest possible use of currency, and by concentrating into large centers all offers for purchase or sale, so that on a common meeting ground of buyers and sellers the exchange of properties can be effected with the least expense, the least risk, and the least delay.

To transform the unsalable individual part ownership or individual indebtedness into stocks and bonds having a wide

market, and to standardize merchandise, is an important step in the development of this time-, risk-, and currency-saving device, without which modern banking is inconceivable.

We have to add one more factor and a most important one. The partial replacement of money by instruments of credit must needs bring about, as a logical consequence, the necessity of reserves of money to meet these credit tokens, to redeem which cash may of right be demanded. How large these reserves must be depends largely on the strength of the confidence—the credit—upon which the general structure is erected, and on the degree of perfection with which these reserves may be made available.

An ideal banking system is that which provides for the legitimate needs of a country at moderate rates with the maximum use of credit and the minimum use of cash, which checks illegitimate or dangerous expansion or speculation, and which avoids or minimizes as far as possible all violent convulsions.

We need not emphasize the fact that the European system comes very near accomplishing this ideal, while our system has proved palpably inefficient. Recent events have again brought it home to us that the richest and soundest country of the world went into a disgraceful state of temporary insolvency, while European nations, poor by nature and loaded down with much heavier burdens than we, have weathered similar storms without any such panic and wholesale destruction of property values. Let us consider, then, wherein our system differs from theirs, and let us see which component parts are missing in our machinery.

II

If we may anticipate our conclusions, we may say that our methods are completely opposed to those of European countries.

The European system aims at centralization, ours at decentralization. Europe believes in and has established a system of central banks, issuing an elastic currency which follows the requirements of commerce and trade and is based, more or less, on bills of exchange; while the United States has so far

refused to reëstablish a central bank and persists in maintaining a system of inelastic currency issued by 6,500 banks. The European system is built on modern bills of exchange, which form the quickest assets; while in the United States, the rediscounting of paper by banks being practically unknown, the chief quick assets relied upon by the banks are call loans on stock-exchange collateral. Europe has a system of general banks with large capitals and branch banks all over the country; we prohibit a similar branch-bank system, and prefer a network of 20,000 small independent banks and trust companies. Europe believes in a system of monthly or half-monthly liquidations for stock-exchange transactions, while the United States maintains daily settlements. Europe has succeeded in working out for each country clear, generally observed, and uniform laws, regulating all commercial and financial questions; while in the United States not only do the laws differ in the various commonwealths, but the underlying principles are not so clearly and so definitely laid down as abroad, and every now and then the basis of the business structure is violently shaken by some new interpretation or legislation, or temporarily upset and endangered by sweeping injunctions.

In order fully to understand the European system, it will be necessary to explain at the outset the importance of the bill of exchange in Europe in the financial intercourse among individuals as well as among nations. In the United States our commercial paper is the old promissory note, it is a *bill*; in Europe commercial paper is a *bill of exchange*. I think that I cannot more forcibly express the difference between the two. In the United States this promissory note is an investment, in Europe it is a means of exchange. If, in the United States, this promissory note has entered the bank, it usually remains there until it falls due; if a New York bank, under normal conditions, should try to rediscount such paper, it would create suspicion and distrust. This means that every dollar invested by a bank in American commercial paper, that is, every dollar invested to satisfy the most legitimate requirements of business, leads, without fail, to a locking up of cash

in unsalable assets. We have been shown bricks of the time of Hammurabi, the Babylonian monarch, evidencing the sale of a crop and similar transactions, and I am inclined to believe that it was as easy to transfer the ownership of these bricks from one person to another as it is to-day for an American bank to realize upon its discounted paper, if indeed it was not easier.

Let us now observe the absolutely reverse method of the European countries. In Europe there are scores of banks and private banking firms that give their two- or three-months' acceptances for the commercial requirements of trade, or that make it their specific business to indorse commercial bills. A commercial borrower in those countries who does not get a cash advance will do one of two things: he will either sell to his bank or his broker his own three-months' bill, drawn on a banking firm willing to give him this credit; or he will sell the bill drawn by him on his customer in payment for goods sold to him, which bill may be subsequently passed on with the indorsement of the banker. Through the addition of the established credit of the acceptor, or by the various indorsements on the bills, the quality of the bill becomes such as practically to eliminate the question of credit and risk, and the conditions of the sale will depend only on the rate of interest. From being a scarcely salable promissory note, the ownership of which entails a more or less pronounced commercial risk, the paper has been transformed, if I may call it so, into a standard investment, the equivalent of which in cash can be easily secured at any time.

This prime constituent of the European banking machinery is entirely missing with us. Its existence is, however, most important. Without such paper, the government banks of Europe could not accomplish their work; and *vice versa,* the rôle which this paper generally plays in Europe's financial household is dependent on the existence of central banks. The two cannot be separated.

It is one of the main duties and privileges of the government banks to buy legitimate commercial paper, with bankers' acceptances or bankers' indorsements. As the govern-

ment banks buy this paper, the circulation of the notes which they issue in payment increases, and on the other hand, as they collect this paper upon maturity and reduce their discounts, their outstanding circulation decreases. This means that they expand or contract according to the requirements of trade. However, this is not a merely automatic process. For as those intrusted with the management of the government bank see the necessity of exercising a restraining influence, they raise the rate at which the bank discounts, and in this they are generally followed by the other banks of the country. In the same way, if the government bank finds it advisable for any reason to discriminate against the paper or the securities of certain groups or individuals, general discrimination by the other banks will usually follow. It might be well to add that the European government banks are not limited to the purchase of paper, but that they also have the privilege of making advances within certain limits upon securities up to a fixed percentage of the market value, according to stated published schedules. The rate, however, at which such advances may be made, as well as the government bank's discount rate, is uniform for everybody and is, as a rule, so much higher than that of the general banks, and the restrictions as to the character of the securities on which the government bank may advance are so much more rigid, that in normal times the bulk of the business is done by the general banks. Only when the demand for money increases does the rate of the general banks begin to approach that of the government bank; but in that case the government bank will, as a rule, raise its rate, so as again to increase the margin over that of the general banks. The government banks consider themselves, more or less, as constituting the national reserve, ready to take an active part in the nation's business only in times of emergency. A distinction is, however, carefully to be drawn between the abnormal crisis and what we may call the normal emergency which arises regularly in consequence of certain economic developments, like crop movements or particular requirements for special industries at fixed periods, and which, as experience has shown, subside after a time as regularly as they

occur. When these normal emergencies arise, the banks do not unduly raise their rate, but for the time being meet all the requirements at a given rate, and allow their circulation to increase, while the reserves go down. When the government banks anticipate, however, that more than a normal emergency will have to be dealt with, they continue to raise the rates in order to protect their reserves and to force liquidation, and in order to deter all branches of industry and trade from entering upon far-reaching new engagements.

The notes which the government banks are allowed to issue are limited by the amount of gold and bullion which must be held to cover them in full, or, as in Germany, up to at least 33%. It would, however, lead too far astray to go into the details of these special regulations which govern the issue of notes in the different countries. It will suffice here to outline the general rule. Each government bank has a very decided interest in keeping its gold holdings as large as possible, and in preventing the gold from leaving the country. If an augmented demand for money and credit accommodation increases the amount of notes outstanding, the government bank, by raising its rate, purposes not only to encourage a general contraction of business, and to force the general banks of the country to contract, but also to attract foreign money into the country. If England has a private discount rate of, say, 6%, that is, if first-class commercial paper accepted or indorsed by banks can be bought on an interest basis of 6%, and if at the same time, there is in France a discount rate of 4%, it stands to reason that the big French banks and the French public will invest in English bills, and that French money will go to England. The same holds good, of course, as to German, Austrian, Russian, or Scandinavian bills. It is, for instance, well known that at present, while rates in Germany are high and in France comparatively low, hundreds of millions of German paper are held by the French banks.

The French banks would not buy the individual note of an English, German, Russian, or Scandinavian merchant whom they do not know; but they do know, and must know, the value of the acceptance or the indorsement of the foreign

banks, which offer and indorse or accept this paper. They would not buy this paper, unless they knew that it could be rediscounted at any time through the existence of a central bank in the home country. None the less, however, the bulk of the business transacted by a central bank is only a fraction of the total business of the country, and is, in normal times, limited almost entirely to the purchase and collection of short bills. The mere existence of the central bank, however, enables the general banks to discount freely; and as everybody thus discounts freely, there is the widest possible market for discounts even without any active purchases by the central bank.

While we cannot attempt to give any full description of the working of central banks, it may be well to add that some, like the Banque de France and the Reichsbank, have hundreds of branch offices, spread all over the country, which, in Germany in particular, have developed an admirable system of collection and of transferring moneys from one place to another. It may also be interesting to note that, contrary to a widespread idea, the central banks of Europe are, as a rule, not owned by the governments. As a matter of fact, neither the English, French, nor German government owns any stock in the central bank of its country. The Bank of England is run entirely as a private corporation, the stockholders electing the board of directors, who rotate in holding the presidency. In France the government appoints the governor and some of the directors (*régents*). In Germany the government appoints the president and a supervisory board of five members, while the stockholders elect the board of directors. The German government receives three-quarters of the profits after the stockholders have received a dividend of 3½%. Thus the central banks are independent of direct government interference, or there is a joint control by government and stockholders. But the government is the largest depositor of the bank, and is thus obviously, both for its own credit and for the welfare of the nation, vitally interested in maintaining its credit at the highest possible point.

The consequence of a broad bill market is that, whereas

our banks keep against their deposits primarily call loans on stock-exchange collateral, a European bank or banker will keep against his demand obligations a large amount of banking paper, which he can sell at any time at the discount rate, without causing any such commotion as is created with us when call money is rapidly withdrawn from the stock exchange.

Call-money rates and their daily fluctuations do not directly affect European stock exchanges. Europe has developed a system of monthly or half-monthly settlements on its stock exchanges, which means that from one settlement to another, the amount of cash required by the stock exchange remains stationary. If, at the settlement, it develops that commitments on the stock exchange have increased, and that a larger amount of money is needed for stock-exchange loans under normal circumstances, so much more money will be withdrawn from the bill market and go into the stock exchange. If less money is wanted by the stock exchange, so much more will go into the bill market. We cannot dilate fully on the interesting question of the comparative merits of daily versus monthly stock-exchange settlements. It may, however, be said that if it is a saving not to settle each transaction by individually delivering and paying for each purchase and sale, but to pay and deliver only the balance of the whole day's transactions by one clearing (without which it would be impossible to deal in a million shares a day), then the saving would be still further increased if the clearings covered not only one day, but a whole week or a whole month. It might, however, be asked: Why not then clear only once a year? The answer is that, until the transaction is actually paid for, there is a risk that with wide fluctuations one of the contracting parties may not be able to pay the difference between the price on the day on which the business was concluded and on the day when it would be finally settled. That is the reason why settlements in England do not exceed two weeks, and why in New York they should probably not exceed one week, for which period some method of clearing the differences daily or of securing them by collateral might easily be devised.

The present American system of daily settlements, however, combined with the lack of a central bank and of modern paper, brings about the shocking conditions from which we are suffering. It is a fact that in Europe, where settlements exist, such wild fluctuations as prevail with us are unknown, except in our own securities.

Our much-maligned stock exchange is the scapegoat of the nation; if trade contracts, the surplus money from the Atlantic to the Pacific is thrown on the stock exchange, creating easy money and encouraging speculation in securities just at a time when speculation ought to be slow. If industry and trade thrive, and are in need of money, call loans are withdrawn from the stock exchange, and, the more money is required by commerce and industry, the more the stock exchange will be depleted. The usual consequence is our annual money panic, and a resulting violent collapse of prices of securities.

This obnoxious system of cash dealings is forced upon us as the result of our unreasonable usury law, which, although making it unlawful to take more than 6% on time loans, is in reality the direct cause of an almost confiscatory rate being charged from day to day for weeks at a time. We shall dwell upon this law later. The fact remains that with a legal limit of 6% for time money, and with the desire of the banks not to charge merchants a higher rate, and with the lack of any modern paper which we could offer to other nations, there remain practically only two means of relieving the stringency and of attracting foreign money. These are the utilization of foreign credit, through long bills drawn by our banks or bankers on Europe (and these could hardly be used during the last crisis in consequence of England's drastic measures) and incredibly high rates for call money, that bring about wholesale realizations and attract foreign buyers at our bankruptcy prices.

Banks have been blamed for the high rates and for having had so much money on the stock exchange. They are absolutely helpless with regard to both. How could a bank withstand a run, if it had all its money in unsalable commercial paper, and how is a bank to meet the demands made upon it

otherwise than by drawing upon its quick assets, *viz.*, its call loans? It is our system that is wrong from top to bottom; it is this and not the individual that is to be blamed in this respect.

The aggregate amount invested in trade and commerce must vary. Its grand total should be many times the amount invested in stock-exchange loans, which represent the securities carried for speculative investors. Our way of doing business may be illustrated by two adjoining reservoirs, a small one and a very large one. The small one represents the stock exchange and contains the call loans; the large one represents the general business of the country, as expressed by commerce and industry. In Europe they regulate the small reservoir by pumping water into it from the large one, or by withdrawing water from the small reservoir into the large one. In this way, the outflow and inflow in the large reservoir are scarcely perceptible, and there is no difficulty in regulating the small one. With us, we do the reverse. If there is a shortage of water in the large reservoir, we begin to draw on the small one and, in order to increase the water in the large reservoir by an inch, we empty the small one altogether or, in order to decrease the amount of water in the large reservoir by an inch, we fill the small one to the overflowing point. Moreover, Europe can tap a third reservoir, the additional currency issued by a central bank, with which to regulate the large reservoir if it fluctuates more than a few inches, while with us no such final reserve exists. As a consequence, fluctuations of several feet appear to be inevitable and regular occurrences with us. It may be added that not for many years has the European reservoir shown such variations as this year, and we must sadly admit that Europe's abnormal rates were due largely to our own unbalanced conditions. Unable to regulate our own household and to use our own gold, we have accustomed ourselves to use and to abuse Europe, which suffers intensely from our lack of a proper system.

III

Let us now add a few words about European and American banks in general.

We have in the United States national banks, state banks, and trust companies, practically without any proper line of demarcation; they are all, more or less, doing a similar business, except that the national banks have the privilege and duty of providing currency against government bonds. In Europe we find the privilege of note issue restricted to the government banks, which are hemmed in by such regulations as to keep them out of speculative business or general commercial transactions. Whenever a note-issuing bank desires to enter upon general business, it has to abandon the privilege of issuing notes.

Outside of the note-issuing banks the only European banks that are regulated by law as to their investments and their way of doing business are the savings banks. For all other banks there is no government supervision, there are no laws as to their reserves against deposits, and no restrictions as to indorsing or establishing branch banks. On the contrary, accepting, discounting, and indorsing paper form the essence of Europe's banking, which is built up on a system of old, established, very important general banks with large capital and with a network of branch offices and agencies all over the country, and in the centers with many branch offices in a single town. On the whole, this system of making large responsible banks and their branches the custodians of the people's money is preferable to our system of allowing a few, often irresponsible, men to get together, hire some ground-floor corner, fit it up in marble and bronze, and call it a bank, with a capital of $100,000, and often less, and a corresponding surplus paid in, not earned. Small banks constitute a danger, particularly so if they accumulate deposits which are out of proportion to their own resources. There is an old French and Italian banking rule that deposits ought not to exceed four or five times the amount of capital and surplus. This rule is certainly a wise one for a country with so imperfect a banking organization as the United States.

While Germany and France may claim the best government bank organizations, there has been too much concentration in the business of the general banks of these two countries. The German and French banks have accomplished a wonderful piece of work, but their system of "taking it all," being banks of deposit, discounters, acceptors, indorsers, brokers, and underwriters at the same time, is not free from danger. Not that there is risk of their getting involved, but there is too much elimination of independent firms, which constitute a valuable backbone, especially in times of need. In Germany, where this process has been most marked, there is a strong movement on foot to undo the harm that has been done.

The English system has, in this respect, so far proved the best, for the reason that, while they have large deposit banks with branch offices all over the country, they have kept these deposit and check banks comparatively free from commission, investment, underwriting, and kindred operations. In England the investment and the commission business remain mainly with the broker, while the contracting of large loans and the formation of syndicates is generally left to private firms, or if it is a question of South American, Oriental or colonial loans, to the banks which confine themselves to business with these countries. Again, there are foreign exchange houses and firms conducting exclusively an accepting and indorsing business; and finally, there are the big discount companies. One might say that every branch of these various enterprises is taken care of in an able and efficient manner in England; business is done at fair rates and at the same time substantial profits are earned.

In Europe the general banks are not required to hold gold reserves. Gold reserves are kept exclusively by the note-issuing central banks, which have outstanding demand obligations payable in gold.

We ought carefully to draw the line between a working reserve and a gold reserve. A general bank has no need of a gold reserve. But every general bank or financial institution ought to have a large working reserve against its demand obligations. Such working reserve, however, need not consist

of legal-tender notes, but of such assets as can be quickly turned into cash credits; be it call loans, bank paper, British consols, or whatever can readily be made available in times of stress. In addition, the European banks generally have very large on-demand deposits, especially with the central bank of the country, and, of course, a substantial amount of actual cash, as it is required for the daily needs of the business.

But why should state banks or trust companies or national banks, if they happen not to issue notes, carry gold reserves? For their own protection they need strong working reserves, but, if it were not for our lack of a central bank and for the shortcomings of our treasury system, why must they lock up legal-tender notes to such an extent?

In Europe the gold reserve and the emergency reserve of the country are kept and managed by the central bank. We have already shown how the government bank acts in protecting the country and in providing for its needs. Let us clearly understand that without the bank rate, that is, without the ability to regulate the rate of interest in times when the government bank's coöperation is needed its efficiency would be *nil*. A system of modern banking paper is absolutely necessary to establish this power of the bank, and furthermore, a credit so firmly established that the higher rate of interest will act as an inducement to invest and not as a breeder of distrust and an incentive to realize. A further requirement is a system of large and conservative banks that will coöperate, and that, as a matter of fact, cannot afford to abstain from falling in line with the general tendency initiated by the central bank.

With such a system, a panic like the one from which we are just emerging should be impossible. For no matter whence money is withdrawn, it would turn up in another bank. It is inconceivable that conditions would nowadays arise in either England, Germany, or France where people would lose entire confidence in all banks, government banks and savings banks, so that actual hoarding and locking away of money would occur. Our worst hoarders, the banks and trust companies, would, under a European system, have no reason to lock up actual money, since they would be fully protected by accumu-

lating a balance with the central bank. The unheard-of fact that during a scarcity of currency the banks, instead of disbursing their cash, begin to accumulate and actually to hoard currency, would be an impossibility.

There are two different kinds of panics or crises with which a nation may have to deal. One is a domestic drain, created by strong domestic demands, degenerating into a panic by some catastrophe engendering the fear that the supply of money will reach an end. Such panics must be met by paying out freely and boldly. Bagehot says:

> A panic, in a word, is a species of neuralgia; and according to the rules of science, you must not starve it. The holders of the cash reserve must be ready, not only to keep it for their own liabilities, but to advance it most freely for the liabilities of others. In wild periods of alarm one failure makes many, and the best way to prevent the derivative failures is to arrest the primary failure which causes them.

And further on he says:

> It is not unreasonable that our ultimate treasure in particular cases should be lent; on the contrary, we keep that treasure for the very reason that in particular cases it should be lent.

Another kind of panic may arise through a drain from without. Such drain must be met in modern countries by increasing the rate of interest until the tide has turned, until the creditor finds it more profitable to leave the money where it brings attractive interest than to withdraw it. Both kinds of panics have been successfully met, or have been entirely averted, in Europe by central banks and by a firmly established credit. Germany, for instance, without such a system, would now be in the midst of a panic; but she has safely avoided it, in spite of her being by nature a poor country, while we, nature's spoilt children, need only be wise to be rich and safe.

As it is, neither can we protect ourselves by a discount rate, there being no discount system, no central bank, and no legal rate beyond 6%; nor can we meet an internal panic because,

irrespective of other shortcomings of our system, it forces each bank to look out for itself and to try to draw away the cash from the others, in order to increase the amount in its own vaults, thus aggravating the panic. While the only way to meet a panic should be to pay freely, any bold action is paralyzed by the frightful thought that there is no way of creating additional currency, and by the knowledge that, if the drain continues, there are no means of preventing wholesale individual failures unless general suspension of cash payments is adopted. While one thousand millions of dollars were lying idle in our banks and trust companies as so-called reserves, that is, as the final resort in case of need, this money, by virtue of the law, could scarcely be touched! What, then, is the use of such reserves, if they are not available in such times, and if, even in contravention of the law, they could not be used by one bank without fear of being ruined unless all banks agreed to use them freely? And as it is impossible, even without such a law, to make all banks act in the same bold way, it follows that reserves should be concentrated, as they are in Europe, and that while the banks may be asked to coöperate, they must be governed in this respect by one central organ.

The question of treasury and government-bond secured bank notes has been so fully and so ably dealt with by Mr. Hepburn in a preceding address, that I can limit myself to the hearty indorsement of what he said in this respect.

The net result of our system is that immense amounts of gold and currency are wastefully locked up, and that, in spite of our immense gold treasure, which is four times as large as that of England, and notwithstanding our enormous *per capita* circulation of thirty-five dollars, we suffer almost annually from acute scarcity of money.

If we only had the means energetically to contract our currency, and to use our gold in a scientific and a practical way, we should have gold and currency enough to meet any panic. As it is, the amount of notes outstanding is about stationary in times of activity or stagnation alike, while as a consequence the rates for money vary between zero and 200%. In Europe

it is the reverse; rates are fairly stationary and the amount of notes outstanding contracts and expands. With a cash balance of $260,000,000 during the recent crisis, our government had to incur new indebtedness to enable and to induce the banks to issue additional currency. Within three months the circulation increased through this artificial process by eighty million dollars, but the government had to lose about $1,000,000 of the people's money to reach this result. On the other hand, the German Reichsbank issued in one week, at the end of last December, M. 320,000,000 and the government received a 5% tax on this issue, which is borne by those who received the money. These notes returned to the Reichsbank within less than three weeks.

Our present system of maintaining and selling government bonds on a basis so high that only national banks can buy them results in constant inflation of our currency by about 75% of the amount of new government securities issued from time to time. Inflation with practically no contraction! It would be cheaper and more straightforward if the government, instead of issuing interest-bearing government bonds, would issue new greenbacks. It amounts to the same thing, and the government would in addition not lose the interest.

Furthermore, our one-man-power system of the treasury is contrary to European ideas; it is harmful to the country and unfair toward the incumbent of the office. While our generation has been particularly fortunate in seeing this office occupied by honest and able men only, the danger remains, nevertheless, that this vast power may one day be vested in less desirable men. Besides, the laws governing the functions and powers of the Secretary of the Treasury are old-fashioned, in parts too loose and in parts too extreme, and not clearly defined, so that even under the same President we find a radical change from one method to another, according to the individual interpretation by the incumbent of the office.

This lack of continuity is injurious. Europe does not give such vast and arbitrary powers to one single political official, holding office for a comparatively short time only, and often without proper business training. On the contrary, the powers,

clearly defined and properly restricted, are vested in a permanent non-partisan body of business men of the highest standard, thus constituting a system which insures clear legal conditions, safety and continuity.

IV

A similar difference exists between the United States and Europe as to general legislation governing banking transactions and corporations. In dealing with these questions it is not my intention to accuse anybody or to excuse anybody; the only object of this investigation is to explain certain fundamental shortcomings of our system.

Modern banking is built upon gold—and confidence. The question of how to estimate working reserves, business risks and profits, as well as the general valuation of securities, all these are indissolubly interwoven with the other question of how firmly established is the confidence on which the whole structure rests and how far this confidence is liable to be shaken in normal and in troublous times.

The basis of confidence is an immutable belief in the continuity of political and social conditions, which are held to be safe and sacred. There must be faith in the continuity of the form of government, in the continuity of the legal status, and in the fair observance of law by government and governed alike. There cannot, however, be confidence in the continuity of the laws until they rest on a broad, equitable basis, and are fairly uniform over the entire country. There is nothing so harmful and so dangerous as the existence of two laws, the one a written law, unenforced and often impossible of enforcement, the other a customary law, which stands unchallenged for generations and which the written law cannot override, often because the latter, enacted in haste or hate, is incompatible with reasonable business usages and necessity.

Just and uniform laws, universally observed and equably enforced, imply wholesome government regulation. Loose or extreme laws that cannot be observed and that, therefore, are not generally enforced, but that may be suddenly and spasmodically enforced according to the whim of the people

or of the party in power (yesterday a dead letter and to-morrow a firebrand), imply anarchy or autocracy. In financial matters Europe has advanced far in attaining the former condition; we have made little progress in emerging from the latter state.

To cite only a few instances:

If the full taxes on capital, at present about 1.68%, were exacted and paid, no capitalist could remain in New York.

If banks did not over-certify, our financial centers would have to stop business.

If it had not been possible to pay rates far exceeding 6% for time loans, it would not have been possible a few weeks ago to draw so much gold from Europe, where money rates were above 6%, and the catastrophe would have been still worse than it was.

But, we venture to ask, why is it necessary to force people to evade the laws in order to carry on business?

Among the important laws that have a distinct bearing on the banking situation, and that are in great need of revision, I should specify the following:

In the first place is to be put the usury legislation of our separate states and especially of New York. The usury laws in Europe, where they exist at all, apply only where the borrower is in dire distress when seeking and accepting a loan, and where the individual or corporate lender knowingly profits from his helpless situation when exacting usurious rates. Usury can be judged only in the light of the surrounding circumstances; and usury laws in Europe generally apply only to individuals. Our law, which prevents solvent firms of bankers, merchants, manufacturers, or brokers from contracting for money on time at more than 6%, implies not only undignified tutelage, but unsound business judgment. The recent crisis has shown that it was not taking advantage of people in need to give them money on time at over 6%; on the contrary, it would have been a blessing, and in many cases their salvation, if they had been able to receive the money at even a much higher rate. This unsound and completely indefensible usury law is, however, the reason why we must have

daily settlements, and in this and other ways it indirectly leads to frequent convulsions of our money rates.

Secondly, the lack of a modern system for discounting commercial paper in the United States is due to the want of uniformity and precision in the laws governing bills of exchange and bankruptcy. This uncertainty as to procedure forces us to prefer the well-defined promissory note—however unsalable—to the business of accepting and indorsing commercial paper at the low commissions customary in Europe. Furthermore, since our commercial business is chiefly financed by the national banks, it is a foolish regulation that prevents their indorsing or accepting such paper to any extent, in order that they may carry out the purely secondary object of issuing bank notes.

Another difference between Europe and America that affects the banking business is the regulation of the issue of securities.

Stock watering, that is, capitalization of earning power and of goodwill, is permitted in England and France, while it is not allowed in Germany. While, personally, I prefer the German system, it is a mistaken idea to think that the capitalization of earning power necessarily means taking advantage of somebody. If the German sells at 200% an industrial stock paying 10% dividends, it amounts to the same as if the Englishman had sold at par twice the amount of shares, on which a 5% dividend is paid. But whether we adopt the one system or the other, it is of the first importance that the public should be fully informed as to the real value of the stock which it acquires, and that the law should be clear and definite in its terms, and equal rather than erratic in its enforcement.

In Germany the law makes all public offerings of securities and applications for listing on the stock exchange dependent on the publication of a full prospectus. This document must contain all facts of importance concerning the security offered and must be submitted to, and approved by, a state commissioner. Anybody withholding information, or furnishing wrong and misleading information, is criminally liable. At the same time, the law requires that balance sheets be pub-

lished regularly, and where the issue deals with a new flotation the prospectus must state clearly the value and the price of the properties transferred to the corporation at the time of its incorporation, and in certain cases also the names of those from whom they were bought.

We come finally to one of the most important of the subsidiary points affecting our banking system, namely, the relation of the directors to the corporation. In most of the European countries, particularly in Germany and France and, to a certain extent, in England, this relation departs radically from our custom. The French and German corporation is managed by a board of directors and salaried managers. The latter are not members of the board, as is the managing president with us. The board of directors in Europe supervise the managers, who have to report to the board about their acts and proposed acts, in order to secure their sanction. The rule is that both the managing officers, whose fixed salaries are comparatively small, and the board of directors share in the profits of the company. The stockholders ordinarily receive the first 4%, while of the surplus over 4%, a certain proportion goes to the managing officers and their staff and to the board of directors. As the corporation grows, the percentage going to the directors and the managers is frequently modified to whatever the shareholders consider a fair compensation. The net profit of the forty-five important German banks for 1906 was M. 231,000,000. The aggregate capital of these banks was M. 2,198,000,000 with a surplus of M. 542,000,000, making their total resources M. 2,740,000,000. Of this net profit about M. 200,000,000 were paid out; about one-seventh, *viz.*, M. 28,000,000, was paid to the managers and staff and to the directors, while the remaining six-sevenths, being M. 171,000,000, were paid to the stockholders, being an average dividend of 8.07%.

The underlying idea is a very different one from our own. The European maintains that, in order to hold any one liable in case he does not perform his duty, one ought to pay him if he does. In Germany, for instance, if a director does not act with what would be deemed ordinary business prudence, and

if he neglects his duties, so that the company suffers loss, he is made personally liable. In the very rare cases of bad bank failures which Germany has witnessed, like that of the Leipziger Bank,—which, however, owing to Germany's admirable system, passed by without any panic—the directors, among whom were men of many millions, lost all they possessed.

While the law is thus very rigid, it does, on the other hand, not require the director to be anything more than honest, or to do anything more than use the utmost possible care. But the board members in a bank, who receive quite a large income through their share of the profits, realize that they must in turn devote a good part of their time and energies to the interests of the bank. All corporations, like the big shipping lines, the industrial concerns, and the insurance companies, are run on exactly the same system. As a result, the so-called dummy director, so familiar to us, does not exist, because every director is materially concerned in seeing to it that the interests of the company are fully safeguarded at all times, and that no one director or manager receives any profits that might be determined to the corporation; while at the same time this system makes the directors disinclined to consent to over-capitalization.

With us, on the other hand, the laws and usages regulating the relations of director to stockholder need much modernizing. We do not pay our directors, for ten dollars or so per meeting cannot be considered a remuneration. Under the old system is was considered good style to be on the board of a bank, as it was to be on philanthropic, religious, or educational boards; membership was, in fact, largely a social function. Or, on the other hand, some individuals were willing to join a board without any compensation, because it was their own business that they were managing; *e. g.*, their own railroad, for which they had to supply the wherewithal themselves, and the territory of which they had to open by taking up farming or mining or by starting other industries. In such cases they sometimes made money and sometimes suffered heavy losses; but on the whole, it was this system of directors as chief stockholders and ever active prospectors, assuming

large risks themselves, that developed the country and made it what it is to-day.

In the course of time, however, as the corporations grew in size and number, directorship ceased to be a social function, and the corporations ceased to be the property of a few. They became the property of a large community of stockholders, and the directors, from being majority stockholders, slowly became trustees.

With the evolution of the modern conception of trusteeship has come the present tendency to endeavor to tie the director hand and foot and to hold him liable if anything goes wrong with the corporation. But let me ask, what right has one shareholder substantially to say to the other: "Go on the board, work for me, worry for me, give your time and spend your energy; I shall not pay you for it, but I shall hold you strictly accountable if anything happens to my company. If you chance to have a business of your own, and if you find any time left for it, be very careful not to do any business with my company. Leave that privilege to me. Because you work for me, you lose that privilege; and because I do not work for you—I retain it." That is virtually the present attitude of the American stockholder and to a certain degree the legal status of the director. Let us do as the Europeans do, let us remunerate our directors in proportion to the dividends they earn for us, and then we shall not only have the full right to hold them liable and to ask them to give up certain privileges, but we shall at the same time have greater certainty that every director will be careful to do his best.

Banking, like almost all other commercial transactions, is in reality an insurance business. For each risk, we ask and receive a premium commensurate with the hazard of the transaction. In a city built on volcanic ground the insurance premium is high. Bankers' profits in America are higher than in Europe; but they must be high so long as, for lack of modern banking methods and of uniform and well-established laws, we live financially on volcanic ground. We have just passed through a pretty lively earthquake, and the losses which wiped out the profits of years show conclusively that the

premiums earned were not too large in proportion to the risk. Do not let us blame the insurance company, but let us be doubly careful to build only in steel and stone and let us build on solid ground. For, luckily, in this instance it is within our power to transform that volcanic ground into a solid foundation.

We are apt to think that our problems are peculiar to us and that we must find our own way of solving them. If we had only realized that American and European history is being written with the same ink, that man is man, with similar virtues and similar vices, on both sides of the Atlantic, we might have learned much from experience, and might have been able to avoid much amateurish and harmful legislation.

Germany also had many sovereign states which ultimately formed a union. In each of these states there was a different legal system,—German law, Roman law, Code Napoléon and all kinds of local laws. Yet Germany organized a commission, which worked for twenty-five years and which finally completed a code of laws to govern the entire country. A uniform commercial code had, in fact, been created far earlier, and Germany has now for many years been enjoying the advantages of uniformity. With us, also, there are surely many questions, social as well as commercial, on which the East and the West, the North and the South, can agree, and on which uniformity of state legislation can be secured—if for no other reason than to avoid the much-disliked federal regulation.

In Germany, Sweden, and Switzerland—the last of the countries to adopt a central bank—we find that obstinate opposition was long directed against the creation of such a central institution, chiefly by the then existing numerous banks of issue, which feared lest their business might suffer. In each country in turn the very banks that were forced to abandon the right of issue in order to become banks of discount and deposit acknowledge to-day that they have derived nothing but profit from the change, and that the central bank has conferred unalloyed benefit on the entire country.

V

While our investigation has disclosed the nature of the ideal, it has, at the same time, also made it evident that we are still far removed from this ideal; so far, in fact, that any attempt to reach it immediately would be futile. We can, indeed, advance only step by step, but I am convinced that we shall never attain the summit of our ambitions or reach a completely satisfactory condition until we have worked our way to a central bank and to the adoption of clear and equitable statutes. We cannot secure uniform laws promptly, but we can begin by modifying some of the laws mentioned above, which are incompatible with common sense, and by creating truly responsible boards of directors like those in Europe.

We cannot have an effective modern central bank, because there are no modern American bills of exchange, and we cannot create a sufficient amount of modern paper without a central bank. We cannot have stock-exchange settlements without the abolition of the usury law; but even after its abolition we must have a bill market before we can do away with daily settlements and call loans, based on these daily transactions. Nevertheless, every one of these changes will have to be effected some day, and it is all-important that each successive step in currency and banking reform be made with this end in view.

From this standpoint it is evident why neither the Aldrich bill nor the Fowler bill can be deemed to be a step in the right direction. Every measure is bad (1) which accentuates decentralization of note issue and of reserve; (2) which uses exclusively bonds as a basis for additional circulation; (3) which gives to commercial banks power to issue additional notes against their general assets without restricting them in turn in the scope of their general business, and without creating some additional independent control, indorsement, or guaranty; (4) which gives arbitrary powers exclusively to political officers, often untrained in business, and usually holding office only for a short period.

A central clearing house, with power to issue against clear-

ing-house certificates notes to be guaranteed by the United States, would, in my judgment, form the best solution for the time being. The creation of a central clearing house with a capital of its own and with a limited dividend, the surplus revenue going to the United States, would leave present conditions undisturbed, and, while offering immediate relief, would at the same time form a sound basis for future developments. The plan would possess the following advantages:—

1. The clearing house would have its own gold reserve.

2. It would centralize the additional note issue and would therefore do better service in permitting legitimate expansion as well as in forcing effective contraction, which, with sixty-five hundred independent note issuers, is well-nigh impossible.

While additional notes issued by a bank mean an increase of deposits, which may perhaps be called any day or which, on the other hand, may remain forever, an advance by the central clearing house would be made to the banks for a given period, after which the money must be returned. It would, therefore, be safer for the banks, and would at the same time insure contraction after a certain time, as in Europe.

3. The central clearing house would be able to accommodate commerce and industry in times of need by accepting commercial assets, provided that they are recognized as legitimate and safe by the indorsement of the local clearing houses.

4. It would leave our national banks without any further independent note-issuing power, and would in this respect be beneficial; for additional note-issuing power should logically carry with it further restrictions as to their privilege of doing a commercial business, whereas their privileges in this respect should rather be increased.

5. Through the share in the profits reserved for the government, the latter would receive some return on the funds which it would deposit with the banks through the central clearing house, whereas at present the government does not receive any such return.

6. It would form a medium through which gold loans

might be contracted with European government banks in a way similar to that by which transactions have been concluded between the Bank of England and the Banque de France.

7. If there were formed to supervise the management of the central clearing house a central board administered by salaried managers, as in Europe, and comprising business men, largely selected from the clearing-house committees, as well as political officials, it would eliminate the arbitrary powers which the Secretary of the Treasury is now called upon to exercise, and it would create a continuity of policy, which is most essential for the development of the country.

8. Finally, it would show that this country is able to produce a body of men as honest, as trustworthy, and as efficient as those into whose hands Europe has confided the care of its central banks. As the confidence in this body grows, as the banks come to feel its beneficent influence, the powers of this clearing house may gradually be increased, and thus from the joint indorsement by the clearing houses we may gradually gain our way to the indorsement and acceptance by individual banks, so that we may finally be able to develop a central organ which, safeguarded from political and from financial domination and rigidly restricted as to its scope of business, will place us financially in a sound and healthy condition and will cause us in this domain, as in others, to be respected as a modern and completely civilized nation.

A CENTRAL BANK SYSTEM AND THE UNITED STATES OF AMERICA

IN dealing with the problem of a "Central Bank of the United States," one should properly discuss first the advantages and disadvantages of the central bank system in general, and then the particular problem of a central bank of the United States.

For the purpose of this discussion, however, I may take it as a matter of common agreement, that in the present state of our civilization, wherever circumstances permit of its establishment, the central bank system is the most suitable and efficient. When the millennium comes, when the reign of eternal peace is ushered in, and when competing armies and navies no longer exist, we may see a system which will centralize all the gold of all countries into one big international reserve, or a system which can be operated without the use of any gold at all, as some theorists, like Prof. Knapp, of Strassburg, foresee. I, for one, do not believe that either we or our great-grandchildren shall have to discuss these possibilities as more than theoretical questions.

While we all hope that the arbitration movement will continue to grow and that wars may in the future become less and less frequent, the possibility of struggles among nations always remains. Hence nations will never consent entirely to abolish their armies and navies, and just as little as they will give up their reserves of powder and guns, will they agree to give up their reserve of gold. This is important; for while, within the confines of our own political boundaries, our present money system acts as a national clearing house—crediting to each of us the net result of his work, and accomplishing this practically without the actual use of gold, by means of bank accounts or of checks to bearer, *viz.*, bank notes,—still ulterior payments between nations, whenever all other means

of settling a debit balance with a creditor nation have been exhausted, must be made in gold.

To meet the immense volume of demand obligations, which are, by their terms, payable in gold, there exists in actual gold under a modern banking system an amount equal to but a small fraction of the total amount of gold debts. This system is therefore safe only if the credit of the banks is so strong as to inspire a confident reliance that even if actual gold in large quantity is at one and the same time demanded from one or from several banks, the metal will not be needlessly and wastefully hoarded, the public and the banks themselves being confident that money so withdrawn will be redeposited, so long as there remain some institutions the credit of which cannot be shaken. Furthermore, the system must be so constituted that in case of a demand for gold each solvent bank will pay out the metal freely and boldly, recognizing this as the sole method of stopping an internal drain, and of preventing it from degenerating into a panic. In addition, the system must provide for a means of successfully combating the export of gold, and of encouraging its import, when necessary, through the medium of the discount rate. This again presupposes the existence of a large volume of safe commercial paper endorsed by, or bearing the acceptance of, well-established banks or bankers, paper which is salable at any time and which, by the customs of the country, is freely purchased or resold by financial firms and institutions, as their daily needs develop. Finally, the laws governing and safeguarding the creation and collection of such paper must be so clear and uniform and the collection of such paper in every part of the country must be so easy, as to make an investment in such paper not only the safest, but also the quickest asset of a bank. These conditions actually prevail in countries enjoying a powerful and well-organized central bank.

There is a very old English phrase saying, "John Bull can stand anything, but he cannot stand 2%." Since this phrase originated, centuries ago, John Bull has seen lower rates, but none the less it remains true to-day. It means that money seeks to draw a fair return of interest, and it illustrates, fur-

thermore, why a period of too easy money invariably brings in its train a period of expansion and overspeculation. With both phases the central bank is intimately connected. As the meteorologist draws his chart showing the points of high and low pressure, and from these deduces the probabilities of wind and weather, so a map could be drawn showing how money, among financially well-organized nations, flows with absolute certainty from the point of low interest rates to the point where a higher return can safely be secured. And just as low pressure is not the only factor determining atmospheric transformations, but as temperature and humidity are important elements as well, so in the movement of money also there are important local questions to be taken into account. Such are the rates of exchange which, as the case may be, either add to the interest rate to be earned in another country, or else decrease the return to be received. There is furthermore the question of the degree of confidence enjoyed by each country.

As the insurance premium is commensurate with the risk of each transaction, so money exacts a larger return from investment in countries which are considered financially less secure or in which, owing to a smaller or more irregular market, the investment cannot be so quickly resold. The total amount which the investor is willing to place in each particular country will depend upon these considerations.

An investigation of European conditions will show that money moves freely, according to this principle, between the larger and well-regulated European financial centres. In the face of political antagonisms money will flow to that centre where the highest interest return can be received, provided that confidence in that particular country is so strong that the higher rate does not act as a deterrent but as an inducement. Thus French gold began to flow into England when the English bank rate went up to 7% at the end of last year. French capital at the attractive interest rate was invested in English bills to such a degree that the balance between the two nations turned in favor of England, and had to be settled by shipments of gold. In a similar way hundreds of millions of foreign capital move into Germany when rates become remuner-

ative there, and leave that country again when the difference in rates, the margin, as the banker calls it, disappears.

We cannot too strongly grasp this idea of the power of the bank rate to protect and to attract gold. Without such power the central bank system is useless; for it would collapse when the first drain occurs.

How is it possible, it is often asked, for England to do this enormous business which comes to it as the world's clearing house, with so small an amount of gold? The answer generally given is that it is possible only through England's power to command the gold—thus implying the idea of immense balances due to England, which are called in when needed. While this at certain times may be correct, it does not state the most important cause, namely, England's credit, the great confidence commanded by the English banks and by their paper and the knowledge that that paper can always be resold without any difficulty whatsoever, and that, if required, it can be collected in actual gold. England's credit and her ability to adjust her rates of interest render her system possible and effective. Between the indebtedness of one nation to another and the actual settlement of that debt in gold there lies as a buffer the borrowing power of the banking communities of the respective countries. Nations financially well-organized will find that for a moderate inducement money will flow to them freely for the purchase of securities, or for the purpose of short-time investment. This buffer is strong in England, as it is weak in the United States. We have no modern and readily salable paper which in critical times we can offer to foreign markets, and while the European banks work with fluctuations within fractions of 1%, our primitive methods often mean that before the tide can be turned we must suffer fluctuations of interest rates of 100% and a fall in the value of securities to bankruptcy prices.

Just as important as the protective power of the central bank is its preventive power. When money becomes too abundant there is always danger that it may leave the country, and also that speculation may be unduly stimulated. It is during such a period of general exuberance and expansion

that the central bank, if wisely managed, will draw in its funds and prepare for the coming storm; to accomplish this it will seek to stiffen money rates, and, by sounding its note of warning, it will often avert the coming crisis or modify it into that normal form of natural reaction which inevitably follows any period of great prosperity and expansion.

On the other hand, a perfect central bank system will protect the country not only from too easy money, but also from too high rates during those periods when money is in active demand, as for instance, in our country, during the crop season. During such times a perfect central bank system will, without unduly increasing the rate, provide freely for legitimate demands. It will be prepared to let its reserve decrease materially, knowing by experience that the notes issued in excess of its normal circulation will quickly return after the particular business of a given season has been done. Thus we see that the end of December annually brings with it a large increase in the note circulation of the German Reichsbank, which notes, however, quickly return for redemption during the first two weeks in January.

From the banker's point of view, the chief features and advantages of a central bank system are the following:

(1) The protection and replenishment of the country's gold holdings.

(2) The creation of an elastic currency which tends to prevent too low money rates in times of abundance, as well as too high rates in times of money scarcity.

(3) The establishment of a broad market for commercial bills. This market at bottom owes its existence and its importance to the central bank's readiness to discount such bills at any time, thus making the commercial bill the best quick asset of a bank.

(4) The fact that it acts as a bed-rock foundation for confidence in times of stress, because it centralizes the reserves of the country, thus rendering possible their free and effective use.

(5) The fact that it creates a central institution able to deal

with other nations, in case exceptional measures become advisable, and with which other nations, even in times of the worst panic, can negotiate to furnish or obtain large loans of gold, as has frequently been the case as between France and England.

The shortest and most striking way to illustrate the shortcomings of our system will probably be to review our experience of last year. We had, like Europe, gone through a period of rapid expansion, probably over-expansion, and a natural reaction was bound to come to us, as to Europe, and it did come to both. Expansion was probably more acute in Germany than with us. Why then did Germany, much weaker than we, weather the storm without a panic, while we went into a most disgraceful state of utter helplessness and temporary bankruptcy?

We may leave aside the ephemeral question as to which "straw" is was that "broke the camel's back." After a long period of prosperity, there will almost always develop some point of weakness where the break will first occur, and, as a rule, that break and the ensuing strain will bring down other parts of the structure affected by dry rot. Some "bubbles" were pricked in Germany also, and some ugly failures occurred there, but they did not create any panic. Distrust did not spread in Germany, because the general system, being what it is, keeps unshaken the belief that against good assets good money will always be available, and so "hoarding" remains an unthinkable phenomenon. Furthermore, there was unimpaired confidence that so long as the Reichsbank was in general touch with the situation, though some things might be rotten, they would remain the exceptions, and that it would be impossible for all or even any large proportion of the financial institutions to be unsound.

We shall not deal with the question whether with us bad judgment and mismanagement had been so extreme that the resultant outbreak of distrust was, as a natural consequence, bound to be as violent as it proved to be, or whether artificial fanning of the flame by agitation, sensation, and exaggeration

played any part in the unfortunate development, or whether such a complete collapse of credit would under any circumstances have been possible had the legal foundation on which the whole industrial and financial structure rested been firmly and equitably constructed and had it been less subject to violent upheavals.

Whatever causes may have combined in the United States to bring about the crisis of 1907, it cannot be doubted that it would never have reached such appalling dimensions had it not been for the lack of elasticity in our currency, the utter uselessness of our reserve, our inability to apply the brakes while we were going too fast, the absence of any means to negotiate for measures of relief with other countries through a channel recognized by them as official, and finally the lack of modern American bills of exchange, which, while serving as the means of settling the daily balances of the nation, would have been assets on which the banks might have realized in Europe and in the United States, by rediscounting among themselves or at a central bank.

When the panic came, no outflow of gold had taken place, and no natural shortage of currency prevailed. Our existing per capita currency was very large, much in excess of that of most other nations, and there were hundreds of millions of currency in the banks and trust companies. But when, owing to an epidemic of distrust, people began to withdraw cash, it became strikingly apparent that our system was only a fair weather system, liable to absolute collapse in adverse times.

Where, as with us, there are no means of issuing additional currency against the best commercial assets, where the enormous reserves of cash, accumulated in the banks, cannot be used because each manager fears a run on his own bank if his reserves go below the 25% limit, it is inevitable that each bank must attempt to draw upon the reserves of every other bank, and that each will hesitate to pay out cash at a time when the panic-stricken public should be fortified in its confidence that its money is safe and that cash is coming out freely everywhere. Under such conditions the drain by the public must increase instead of being stayed, and it is inevitable that the

worst and most aggressive hoarder will come to be the bank or trust company, which, realizing that its 25% cash reserve is quite useless, will, as an act of self-protection, and because no other way exists, use every means of "building up" a reserve, by preying on its neighbors, at the very moment when reserves should by all means be decreased.

From such a system there can result only one consequence: a tremendous rise in interest rates and a tremendous fall in the price of securities; and if even these brutal effects do not attract foreign capital and do not convert the home depositor and hoarder into investors, a general suspension—politely called clearing-house certificates—must follow in order to prevent wholesale individual suspensions. Our system, in fact, did not permit us even to suspend scientifically. When New York began to issue clearing-house certificates and all the rest of the country had, as a natural consequence, to follow, the struggle for gold and currency became even more acute among the various cities, and a shameful gold premium which lasted for several months drained Europe's gold chests and brought needless harm and anxiety to our friends on the other side of the Atlantic.

Some years ago a stranger arrived late at night in a German town, and when he was about to leave the station, he saw that there was only one cab left. He hailed the driver, who, however, refused to move, and the policeman explained that as the law prescribed that one cab should always be in waiting at the station the cab could really not be allowed to leave! Ridiculous as this story may appear, it is quite applicable to our law which prescribes that the 25% reserve must always be kept intact.

It cannot be too strongly emphasized that our most urgent needs in addition to the creation of an elastic currency are concentration of reserves and the possibility of concerted action in lieu of our present system of decentralization.

Let us now consider what circumstances there are to prevent us from establishing a central bank similar to those found in the European systems. The chief difficulties are the existence of our bond-secured currency, the decentralization of our note-

issuing power and of our reserves, the lack of modern commercial paper on which to base an elastic currency, the existence of our obsolete usury laws, and finally the deep-rooted prejudice against anything bearing the name of a central bank, the fear alike of politics in business and of business in politics.

It is unnecessary to make a long argument against bond-secured currency. Only weak nations or a people in times of stress, generally during a war, have issued bond-secured currency, and every healthy nation as soon as it was again strong enough, has always abolished this obnoxious system of inflation. As long as we have this bond-secured currency, we cannot succeed in getting an elastic one. Bond-secured currency always expands, it hardly ever contracts. Our recent legislation, enacted last summer, was wisely created as a temporary measure only, since a far-reaching reform could not be successfully achieved in a hurry and without thorough research. The new law is an important step in advance, inasmuch as for the first time commercial paper is admitted as a basis for the issue of notes. But unfortunately the issue of notes against commercial paper is made dependent upon the previous issue of bond-secured currency to the extent of no less than 40% of the note-issuing power of a bank. This, and other conditions imposed upon such note issue, make the new currency an emergency currency, but not a healthy and normally elastic currency.

With elasticity we generally connect the idea of the rubber band. If we take an old and frayed rubber band, which has been stretched to its utmost capacity by holding together a large bundle of papers, we cannot make the old rubber elastic by tying to it a new piece of elastic band. Where this has been done we have indeed made room for more papers and when this new room is filled, some little elasticity will develop, but if the papers should then decrease below their previous maximum size, the rubber band will stay as it is—it will not contract. In order to have effective elasticity, the band must still fit tight when the bundle has been reduced to its smallest size. This means that in order to make the old band elastic we must shorten it considerably before we affix the new elastic

addition. In other words, we must first of all redeem our bond-secured currency so that our note issue may hereafter be able to contract in times of abundance and so that roughly from the lowest point upwards the note issue shall remain in healthy touch with the demand for currency.

In redeeming the bond-secured currency, two points will have to be borne in mind: the one is that it must be done without injuring the banks that now own these bonds, or it will never be done—and besides, to do it otherwise would be unfair; and the other is that we must be able to provide new currency when we withdraw the old, so that no scarcity will be artificially created.

If I were asked to suggest how this could be done, I should propose an inverse conversion of the bonds, *i. e.*, I should advocate the conversion of the present government bonds into bonds bearing a rate of interest higher by so much that after the privilege of issuing notes against them shall have been withdrawn, the bonds will sell just as high as, and possibly a little higher than they now sell with this privilege. This can be done gradually and in various ways; it would indeed mean an increase in the yearly interest charge to be borne by the United States, but it would put our bonds on a natural basis, like the English consols or French *rentes,* so that the American people could afford to own their own government bonds. In fact, this money, by securing a healthy financial system, and by protecting us from a repetition of past convulsions, would come back to us a thousandfold, and would constitute the best expenditure that our government could make.

In creating the new currency, we could probably follow the lines of the recent legislation, and provide for the organization of currency associations throughout the country. These associations, which should be open also for state banks and possibly also for trust companies, and which should be modified in many other respects, would discount the legitimate commercial paper handed in by their members and pass it on with their indorsement to the central issue department at Washington, which in turn would issue its notes against such guaranteed paper. Of course, such paper with such guarantee

should be taken at par, and not at 75%, as at present provided, and it should be taken at a uniform rate, to be published from time to time by the central issue department. The currency associations would receive from the institution handing in the paper a certain remuneration for every endorsement or guarantee executed by them. (Whether the profit, after paying for the running expenses and after having accumulated a large reserve fund, should in years to come be paid out to the members of the associations, in proportion to their pro rata of the guaranty, is a detail to be worked out later.) A most important consequence of such a development would be that we should break with our present dangerous system by which the banks are filled with single-name paper which they cannot resell, and which, under our present conception of banking, they could not attempt to sell without ruining their credit. The laws would, of course, have to be so amended that banks could indorse and accept freely as in Europe, and it will in time follow as a natural development that discount companies will be created, as in England, and that when money is in active demand in the South and offered freely in the East, the southern banks, instead of rediscounting with their association, will be able to rediscount frankly and openly in New York or in Boston or in Europe. If, as it is to be hoped, the currency associations and the discount companies will, at the proper moment, begin to establish two different rates for guaranteeing paper, a higher one for single-name paper, and a lower one for paper bearing in addition to the commercial signature the acceptance of a bank or banking firm, we shall give an added stimulus to the modernization of our paper. When our banks once feel that they can rely on being able to rediscount their legitimate paper, they will be able to purchase the same freely without, as now, running the risk of dangerously locking up their capital through such investment.

I have repeatedly dealt with this question and with the disastrous effects of our usury laws, and have tried to show that our system is in this respect directly opposed to the European system, and that our almost annual convulsions will perforce continue unless we make our commercial paper the quickest

asset and the basis of our banking, instead of using the stock-exchange call loan for this purpose.

As for the organization of such a Central Issue Department, I have also dealt with this question on previous occasions,[1] and I must not go fully into the details of that problem here. Suffice it to say that the board of trustees or directors should be composed of delegates from the various currency associations, of the Secretary of the Treasury, the comptroller of the currency, some members of the Senate and of the House, to whom some members of the commercial classes might be added by election of the stockholders. This body of men should elect two governors, salaried officers of highest standing and training, who would be retained in office as long as they are effective and honest, irrespective of the political party that may for the time being be at the helm.

The powers of the Central Department of Issue should be strictly limited, and should be as follows:

To discount paper, running not to exceed three months, for the various currency associations; to make advances against certain bonds (government bonds, savings-bank bonds, *etc.*) at uniform, published rates and up to certain percentages of their market value to be designated from time to time. (Whether such advances are to be made only through the currency association or also direct, is a detail which can be left open for the time being).

To buy and sell foreign bills running not to exceed three months and bearing at least three *bona fide* signatures.

To deal in bullion and to contract for loans of bullion.

To act as the depository of the treasury's money without giving collateral.

And finally, to receive deposits from the currency associations.

The Central Issue Department may issue notes which must be covered by gold or commercial paper; no less than one-third of the notes issued to be at all times covered by gold or legal tender.

[1] *Cf.* Defects and Needs of Our Banking System, and American and European Banking Methods and Bank Legislation Compared, *supra*, pp. 7 and 30.

A Central Department of Issue so constituted would be beyond any possibility of abuse for political or other purposes. The constitution of the board and the limitations of its power preclude any such possibility, however remote.

As the Central Department of Issue must command the highest possible confidence and as it is necessary to provide a strong gold purchasing power from the start, it is suggested that the department be endowed with a large stock capital of, let us say, \$100,000,000. In order, however, to prevent any possibility of having the department administered with a view of earning large dividends for the stockholders, it is proposed to limit the dividends to a certain percentage, and after having accumulated certain reserves, to turn over the balance to the United States government. Whether or not, in consideration of such profit to be received, the United States should guarantee the notes, may be left for future consideration.

The bugbear that somebody might buy the control of such an institution may safely be dismissed. A man or a group of men purchasing all the stock would not derive the slightest profit from it, except the limited return on the investment. They could not appoint the board, and even if they could do so, they would not profit by it, as the department is restricted to a limited number of safe transactions.

The Central Department of Issue should have the right to ask from time to time that the banks, through the associations, deposit with it a certain proportion of their cash reserves, and the law would have to be amended so as to allow the banks to count as cash their deposits with the Central Department of Issue. The object of such an amendment is obvious, as the gold in the hands of the Central Issue Department can do thrice the amount of good that it can do with the individual bank, which, after the organization of a Central Issue Department, need not fear the withdrawal of cash so long as by rediscounting its sound and legitimate paper it can secure currency.

As for greenbacks and silver certificates, I believe that we could well afford to leave them untouched for the time being and possibly use the surplus to be derived from the profits of the Central Issue Department for the purpose of gradually re-

tiring the greenbacks. With the bond-secured currency redeemed and replaced by an elastic currency, it is conservative to hope that with the large exporting power of this country, we shall be sufficiently equipped to protect our gold, and that the greenbacks and silver certificates will represent no more than the pocket money of our large population. However, this scheme with all its details, as far as they can be outlined in this brief address, does not pretend to be the only solution of the problem; it is a suggestion, subject to many modifications. I have great hesitation in outlining it at all, for while the Monetary Commission is so seriously at work, accumulating material for thought and study, I should have preferred not to express any views at this time. However, as this most important question cannot be solved by the politician alone, nor by men of science alone, nor by the business man alone, I feel that we, each of us, must do our little share, when called upon, and I therefore accepted your invitation, though fully realizing my own shortcomings for such an undertaking.

The advantage of the scheme as outlined is, that instead of trying new experiments, it proceeds on lines which have been successfully followed in the most important financial centers. Conditions are too different with us to permit of an exact copy of any of the European systems; but the proposed plan would tend toward the gradual evolution here of conditions that, as we develop, would render the Central Issue Department more and more efficient and simple in operation.

Some schemes which have heretofore been advanced propose to leave the note-issuing power with the national banks, and to regulate their reserves and rates by a central board or similar institutions. I for one, do not believe in such plans. Their shortcoming is, that in order to be efficient they must interfere too much with the liberty of conducting business. For such a central board would eventually have to dictate the rates at which the banks would be allowed to take money or to lend money, and a general guarantee of deposits is only one of the logical consequences of such a scheme. As a matter of fact, under that scheme there would be one central board managing all the banks—an entirely new departure and much

more drastic than any central bank. If under that scheme such central interference were made less effective than above outlined, our present defects, *viz.*, the weakness of scattered reserves, and the danger of the decentralization of the note-issuing power into more than 6,500 banks, would remain as obnoxious as before.

Other schemes have been suggested, which propose to regulate the whole question automatically by a tax; but automatic measures cannot possibly meet in the most efficient way all the different eventualities that may arise. A drain from within must be met in a very different way from a drain from without, and a drain from both within and without will again have to be treated in a different way. How, then, can we hope to attempt to create one measure which by a tax will automatically meet all these varying requirements? Besides, these measures provide for inflation without creating new reserves or effective means to attract and retain the gold. Most of these measures will remain passive measures; they have scarcely any preventive or protective power at all.

Some people believe that we should imitate the Canadian system. Without going into the question whether a system that has proved a success for six million people would also be well adapted for a population of eighty-five or ninety millions, (and without discussing the point whether this system, like many others, could survive in the absence of the close relationship with the well-organized English banking community), we shall follow out only this one thought: The Canadian system is based on the small number of some 30 banks with branches in every hamlet. The minimum capital of a bank admissible by law is $500,000, but the majority of the banks have a much larger capital, some up to $14,000,000. Of our 6,650 national banks, 5,367 have a capital of less than $100,000. Are all of these to go into liquidation? And would not a concentration of the whole banking power into the hands of a few gigantic institutions with branch banks bring about the very conditions which popular sentiment abhors, and which the government is striving to avoid?

The central bank system—and also the modified system of

a Central Issue Department—stands for sounder principles in this respect: it centralizes reserves and brings about the possibility of concerted action in the face of danger. By creating safe conditions, it makes the small bank independent and the danger of an overpowering individual control, instead of being aggravated, is for this reason immensely lessened by a Central Issue Department. Thus the Central Issue Department would protect the small bank and not menace it as is generally believed.

The Central Issue Department is sound also in this, that each transaction which it brings about, directly or indirectly, is a plain business transaction. If a bank desires its paper guaranteed by the currency association the bank pays the commensurate commission for such indorsement, and the guarantors earn the commission. If the currency association finds the security insufficient, it will refuse the business. Each transaction is an individual one, carefully scrutinized, and there is no unbusinesslike wholesale guaranty.

Nor is there any real interference; each bank deals with the currency association of its own free volition, and through it with the Central Issue Department. The Central Issue Department can post the rates at which it is willing to do business with others, but it cannot force anybody to do business at these rates, nor directly interfere with anybody's conduct of business. It is its indirect influence which is strong, and which is of the most beneficial effect.

Furthermore, it is a sound principle that the financial affairs of a nation should be guided not by an automaton but by will-power and brains behind the machinery, though strong restrictions must give the assurance that this will-power cannot go beyond certain safe lines. Such a system will be a vast improvement upon our present treasury organization, which is constructed on the one hand in order not to do what a central bank of issue ought to do and which, on the other hand, as a consequence of our defective system, has gradually vested in the Secretary of the Treasury more autocratic and dictatorial powers than any central bank manager could ever exercise.

Finally, banks are money-making concerns. Money mak-

ing and money issuing are two entirely distinct functions. It is precisely in order to abate eagerness in making money that the issuing of money at times must be rendered more difficult. Moreover, the note-issuing bank must be put beyond the danger of material losses and beyond the possibility of being drawn into individual transactions, for otherwise its credit will not be unassailable as it absolutely must be, even in times of the worst panic. The ordinary bank, on the other hand, has the duty of taking commercial risks and of carrying on individual transactions. That is why with us, as in every modern country, general banking and the issuing of notes must be kept separate.

I have avoided calling the institution of the future a central bank, because, as proposed here, it is not a central bank. If, instead of the independent currency association, this Central Issue Department were endowed with active branch offices dependent upon the head office, such a name would be correct. No doubt a central bank with active branch offices would be the more efficient, so far as concerns the controlling of the country's gold, its money rates and its financial safety. But with our present political and financial conditions, it would probably be impossible, and in many respect unsafe, to vest such vast powers and duties in one body. Though the system suggested by me may be a little less effective and more cumbersome, we must, for the beginning, at least, interpolate the currency association, or some similar institution, to stand as guarantor and examiner between the Central Issue Department on the one side and the local bank and its customer on the other. As our banking paper becomes modern, and as safe standards for the same develop, as we outgrow those financial and political dangers which are stronger in a country in its period of rapid growth than under conditions of more advanced and slower development, we may gradually—and it is to be hoped, soon—simplify the system. But it is safe to leave this further development to the future, provided that we now find the right principle for the establishment of a sound basis. In constructing such a basis, it is better to err on the conservative side than to attempt too big a stride at the beginning.

While we may disagree as to the extent to which a central bank system may be applied in the beginning, there cannot be the slightest doubt that the principle of that system must be adopted.

It is most surprising that so ineffective and obsolete a currency system as that of the United States should have been so long maintained by so eminently practical a nation. The explanation is that the wonderful resources of the country, its marvelous prosperity and natural everlasting credit balance against other nations appeared to legitimize and justify our system. The currency reformer has always been met with the argument that while theories might be good for poor little Europe, practise proved that the American system was sound enough for the United States. We had to live through last year's horrible crisis to learn that we had been prospering in spite of our system, not in consequence of it, and that, unless we effect a thorough reform, the future is bound to bring us similar disasters and similar disgrace as the past.

It is our duty to keep the memory of the crisis of 1907 fresh in our minds, for unless we grasp not only the danger but the certainty of its reappearance, we shall not realize the blessings and the absolute necessity of a central bank system in the United States.

A UNITED RESERVE BANK OF THE UNITED STATES

THE summary of a recent investigation undertaken by the *Banking Law Journal* discloses the fact that out of 5,613 answers given by national and state bankers to the question: " Do you favor a central bank if not controlled by ' Wall Street ' or any monopolistic interest? " 59⅓% were affirmative, 7% were undecided, and 33⅔% were negative. Almost all the negative answers, as far as published, are based upon the argument that a central bank, if established, could not permanently be kept out of political or " Wall Street " control. Between the opponents and the champions of a central bank plan there is complete unanimity of opinion that such a system should be tried in our country only if the dangers of " Wall Street " or political control can be absolutely averted.

The main question at issue is this: Is it possible to evolve a plan which, while containing these elements of safety, will at the same time be completely practicable?

It is our belief that no progress can be made by meeting the sweeping assertions of those opposed to a central bank plan by equally sweeping replies, but that advance is possible only by outlining a tangible plan for such a bank. This, on the one hand, will give to those not yet familiar with the actual working of such an institution an opportunity for study, and on the other hand it will force the critics of such a plan, it is hoped, to offer specific and well-defined objections which may lead to some definite results.

It should be stated at the outset that the plan here submitted does not suggest a central bank such as exists in various European countries. It is a scheme based upon conditions peculiar to our country and our form of government. It recognizes the vast territorial area of the United States, the diversity and dissimilarity of interests, and even the traditional, sectional

and partizan prejudices of the people. In consequence of this, many features which are contained in European plans and which figured, to some extent, in the operations of the First and Second Banks of the United States have been omitted, while certain features foreign to European organizations have been incorporated. All the underlying principles of safe and intelligent modern banking, however,—principles which must be adopted if we are to obtain a banking system adequate to our present and prospective needs—have been observed and are embraced in the plan. This essay, while advocating the central bank idea, submits a much modified system, which we should like to designate the "United Reserve Bank of the United States." The plan does not pretend to be final or complete in all its details; its purpose is to indicate the fundamental principles upon which the solution of the problem depends and to point out one method of solution.

The strongest arguments made against the plan of a central bank in the United States are those advocated by Mr. Victor Morawetz and by Professor O. M. W. Sprague. We have made free to answer these two critics in the second and third parts of this essay, and in endeavoring to refute their arguments have attempted at the same time to meet the principal objections of other critics whose writings have come to our notice.

I

Let us assume that a United Reserve Bank of the United States be established in Washington with a capital of $100,000,000 fully paid. Let us assume the United States divided into twenty zones of operation, similar to the currency-association districts now proposed by the Aldrich-Vreeland measure, each zone of operation to contain a voluntary association of banks grouped around a financial and commercial center, in accordance with a plan to be worked out in detail. To form the operating associations, which we shall call banking associations, the banks within each zone should have the privilege of appointing from their own number a board of directors, who in turn may appoint a president or managing director of

the association. Certain mistakes which crept into the Aldrich-Vreeland bill must be avoided. The measure should be drafted so as to permit a bank to withdraw from the association at will; to restrict the obligations of each bank to certain transactions, in each case carefully examined and approved by the associations; and also to enable the associations, with the approval of the Secretary of the Treasury, to group themselves into subdivisions. One might simplify the formation of these associations by making them stock companies, each bank within a zone of operations having the privilege of subscribing its *pro rata* share, according to its capital and surplus.

In order that the board of directors of the United Reserve Bank in Washington may be thoroughly representative of the various interests and districts of the country, that it may be non-political, non-partisan, and non-sectional, a certain number of the directors, say three-fifths, should be appointed by the banking associations; a further number, perhaps one-fifth, should be elected by the stockholders; while the Secretary of the Treasury, the comptroller of the currency, the treasurer of the United States and others to be nominated by them, should fill out the remainder of the board. It might be advisable to provide that no director, excepting the *ex officio* members, should serve more than a certain number of years in succession.

In order that commercial interests be adequately represented, provision might be made that the members appointed by the stockholders should not be bank or trust-company presidents, and that these members should be elected preferably from the class of merchants and manufacturers. One would then have a mixed board, of whom three-fifths would be bankers, appointed by the banking associations, while one-fifth would be chosen from the commercial classes by vote of the stockholders, and one-fifth would be *ex officio* government members and the additional members appointed by them.

This board should have the right to elect one or two governors of the United Reserve Bank, who would be salaried officers appointed, like other bank presidents, for an indefinite time, irrespective of political considerations, and remaining in office as long as they render satisfactory service.

The share capital of the United Reserve Bank could be divided among the banks of the country under a fair plan of apportionment, or the stock could be sold to the public. The dividends on the stock should be limited to, let us say, 4%. Any profit in excess of this should go to the government. A provision that no one stockholder be allowed to have more than a certain number of votes should be inserted.

The United Reserve Bank should be authorized to perform the following functions:

(1) To accept deposits from the government of the United States and from members of the banking associations only. No interest should be paid on such deposits, but they might be counted as cash by the banks and trust companies making them.

(2) To buy from members of the banking associations, at a discount rate to be published from time to time, commercial paper having not more than twenty-eight days to run, and issued at least thirty days before the date of rediscounting. The aggregate amount which it might buy from each member should be restricted to a certain proportion of the unimpaired capital and surplus of such member, and the aggregate amount issued by one issuer of commercial paper to a member of the banking association and rediscounted with the United Reserve Bank, should also be limited to a certain proportion of such unimpaired capital and surplus.

(3) To buy from member banks, at a discount rate to be published from time to time, commercial paper having more than twenty-eight days to run, but in any case less than ninety days. The aggregate amount to be rediscounted by the United Reserve Bank from each member and the aggregate amount admissible from individual makers of notes should be restricted as under (2). Such paper, however, could be discounted by the United Reserve Bank only with the indorsement or guaranty of the banking association to which the member belonged.[1]

[1] In consideration of such guaranty or indorsement, the banking association would receive from the member handing in paper for rediscount a certain remuneration, let us say ¼ or ½ of 1% in the interest rate. The banking asso-

(4) To buy, at a discount rate to be published from time to time, paper having no more than ninety days to run, drawn by a commercial firm on, and accepted by, a bank, trust company or banker, and indorsed by a bank, trust company or banker. One of these signatures should be that of a member of the banking association. Limits as to amounts of acceptances admissible from time to time for discount with the United Reserve Bank should be fixed by the central board.[1]

(5) To buy bills on England, France, Germany (and such other countries as may be decided upon), such bills to have a maximum maturity of ninety days, to bear one commercial signature, to be drawn on and accepted by a well-known foreign banking house and indorsed by a member of a banking association or a banker in good standing. The United Reserve Bank should have power to resell all bills that it might buy and to do all things necessary for their collection.

(6) To deal in bullion, and to contract for advances of bullion, giving security therefor and paying interest on such advances.

(7) To buy and sell bonds and treasury notes of the United States.

(8) To issue circulating notes, payable on demand in gold; such notes to be secured by bills, bought by the bank under provisions (2) to (5), and by gold to the amount of at least 33⅓% of the aggregate amount of outstanding notes.

(9) To establish branches in places where there are head offices of banking associations. Such branches under the direction of the central board of the United Reserve Bank, might do the same business as the head office. Each branch would have a local board, chosen by the board of managers of the local banking association, to which board might be added some members of the commercial classes appointed by the head

ciations would, of course, like the clearing houses when clearing-house certificates are issued, have the right to reject any paper which they did not deem it safe or proper to guarantee or indorse.

[1] It might be advisable to provide that in case of emergency the central board, with the approval of the Secretary of the Treasury and the President of the United States, might increase the limits fixed under (2), (3) and (4).

office in Washington. This local board would supervise the business of the branch bank, and elect its salaried president, subject to the approval of the central board in Washington.

(10) To request banks or trust companies desirous of making use of the services of the United Reserve Bank, to keep with its branches a cash balance commensurate with the amount of business done by them. The United Reserve Bank should have the right to transfer sums of money from the account of one member to that of another upon request.

(11) To join the clearing-house association of the various cities where the bank and its branches are located.

Let us now consider the plan, as above outlined, from the following points of view: First, would it be safe? Second, would it be effective? Third, would the vested interests of the banks have reason to oppose or favor it, and can the general prejudice existing against any such plan be overcome?

The chief criticism that has been raised against a central bank is that it is subject to the danger of control either by politics or by Wall Street finance. Would this danger exist under our plan? Could anybody acquire control? Nobody could do so if a provision were made that the stock should be divided among the 18,000 banks of the United States.[1] But even without such provision there would be no danger on this score. A man or a group of men acquiring the whole capital stock of the United Reserve Bank would, after all, acquire the right to appoint only a few members of the board, who would be in a hopeless minority against the combined members of the banking associations of the whole country and those representing the government.

But furthermore it is evident, with the restrictions placed upon the United Reserve Bank as to the transactions in which it might engage, and with the restrictions as to the earning power of the stock, that the control of the United Reserve Bank by one individual or a group would not offer any attraction.

[1] The author is fully aware that there are only about 6,500 national banks now, but it is to be expected that under any new plan all national banks would become state banks or all state banks national banks. It would, however, lead too far to go into this question here.

As an investment it would not pay, because any earnings in excess of 4% would go to the government, and as for securing help for speculative ventures or aggrandizement of power, this aim could not be achieved by the control of a bank restricted in its dealings to the purchase of short paper from member banks, and of three-months paper which could be acquired only from the banking associations. Taking into consideration all these safeguards, namely, the method of appointing the board, the restriction of income on the stock, and the limitation of transactions permitted, it is absolutely safe to say that under such a system any fear of undue financial or political control may be dismissed once for all.

Secondly, would the plan be effective? It is easy to devise a plan that would be ultra-safe, and not very hard to create one that would be effective, but to combine safety and effectiveness is difficult. Let us first determine what is the main object of a central bank, and then investigate whether the plan above outlined would fulfill this purpose.

A central bank acts as a central reserve of a nation. Its first duty is to see that a proper proportion is maintained between actual cash reserve and all demand obligations of the nation which are payable in cash at the option of the payee, but of which the majority are habitually paid by exchange of credits. Its duty in this respect is two-fold: on the one hand, to protect and to strengthen the country's holdings of gold, and on the other hand to establish and maintain a perfect system of credit, enabling the general banks to transform cash credits into actual cash with such absolute ease and certainty that the use of the cash credit, instead of the actual cash, will not cease, no matter what may happen. In other words, there must not remain the faintest possibility of hoarding during a crisis, or the system will fail. In order to assure this, cash credit must not only be as good as cash, it must be better than cash! The carrying of cash entails a risk of actual loss as well as a loss of interest; a cash credit is free from this first-named evil and, in addition, investments which can be quickly turned into cash credits bear interest. The general tendency of civilized people in a well-organized country must therefore be to

free themselves as rapidly as possible from cash and to transform it into the safer and more economical cash credit or into assets which can be quickly transformed into cash credits. Every idle token of money must, therefore, under a modern system return without delay into the central reservoir, where it must be unreservedly available for every legitimate demand for cash. There must never arise any doubt that a legitimate demand for cash will be met promptly and that legitimate quick assets can be turned into cash credits.

If quick assets can be promptly and reliably turned into cash credits, and if cash credits can be turned into cash at will, then it is certain that all such credits never will be turned into cash at the same time, because nobody has any use for so much cash and therefore he will not ask for it, as long as he is sure that he can get it.[1] This is the only basis on which our modern system of immense demand gold obligations, built up on a comparatively small amount of cash, is safe.

Let us use an illustration for this fundamental point: [2]

If after a prolonged drought a thunderstorm threatens, what would be the consequence if the wise mayor of an Oriental town should attempt to meet the danger of fire by distributing the available water, one pailful to each house owner? When the lightning strikes, the unfortunate householder will in vain fight the fire with his one pailful of water, while the other citizens will all frantically hold on to their own little supply, their only defense in the face of danger. The fire will spread and resistance will be impossible. If, however, instead of uselessly dividing the water, it had remained concentrated in one reservoir with an adequate system of pipes to direct it where it was wanted for effective use, the town would have been safe.

Ridiculous as these conditions may appear, the parallel with our own financial organization is evident. Our reserves of

[1] This applies only to the internal drain. We shall deal later with the demand for gold that might arise from without.

[2] This illustration is taken from the writer's pamphlet, *The Discount System in Europe*, published by the National Monetary Commission, which appears at p. 129, *infra*.

cash are entirely disconnected; they are insufficient for even a single institution in times of serious stress, and instead of being a protection they are a dangerous weakness, because the consciousness of insufficient protection causes one bank to try to draw on the reserves of others, and the very moment these mutual attacks begin, panic inevitably follows.

Our true conditions are, as a matter of fact, even more preposterous than those in the Oriental town, by reason of our law prescribing that a certain proportion of the deposits must be kept in cash,—a law which must be observed if a bank wants to preserve its credit. Not only is the water uselessly distributed into 18,000 pails, but we are permitted to use the water only in small quantities in proportion as the house burns down. If the structure consists of four floors, we are practically forced to keep one-fourth of the contents of our pail for each floor. We must not try to extinguish the fire by using the water freely in the beginning; that would not be fair to the other floors. Let the fire spread and give each part of the house, as it burns, its equal and insufficient proportion of water.

As long as the owners of houses threatened with fire know that the central water supply is well in hand, with one central power, available wherever danger may arise, everybody feels safe and is not frightened by the thought that if all the houses should burn at the same time there would not be enough water to go around. Though there may not be enough water for the last house that might burn down, even the owner of that last house would not ask that some water be kept back for him, because he realizes that unless the fire be stopped before it reaches him, his own little supply of water will not help him.

If, however, a central system does not exist, everybody will hoard water, trying to steal it from his neighbor or from the community by tapping some source in order to create a supply of his own. He will lessen thereby the full supply that ought to be led into the central reservoir, without protecting himself adequately in time of danger.

The main function and object of a central bank is to make every dollar which lies idle return to the central money reservoir to make it available to the fullest extent, wherever and

whenever it can do good legitimately, and to provide a system of mains, by which it can be conveyed quickly to any point of danger.

Note issue is not a fundamental, but only a side question, and it is very important to grasp this fully. If the British government should issue a government loan and use the proceeds to pay into the Bank of England in gold £18,400,000, thereby paying off its present indebtedness to the bank and providing a gold cover for the uncovered portion of the note issue of the bank, the latter could pay off every one of its sterling notes in gold. If this were done, the only change would be a change in pocketbooks, to enable people to carry gold instead of notes. The central bank system of England would go on absolutely undisturbed. With or without the note-issuing power, the Bank of England would remain the central reservoir of gold. It would continue to protect England's gold holdings and to maintain the proper proportion between the country's demand obligations and actual cash. It would continue to guarantee the prompt transformation of cash credit into cash and of quick assets into cash credits.

This is possible only through the discount system. The banks know that they can, in case of need, rediscount their legitimate bills with the central bank. The central bank, on the other hand, having a large investment in bills of short maturity, can, by increasing its discount rate, withdraw from new investments and thereby strengthen its reserve. Incidentally, by increasing the interest rate of the country, it attracts foreign money, wards off gold exports, and by throwing part of the burden on the general banks brings about a general contraction of business.

Money flows where it can draw good interest in safety. Where credit is firmly established and financial organization sound, money flows easily from one city or country to another, for a difference in interest of a fraction of one per cent. It is humiliating to realize how large a margin in interest rates we must offer to attract money, as compared with our European competitors. This question and the working of the discount system, of which the central bank system is a part, have been

dealt with fully in my previous paper, so that I need not dwell on them here.

Elastic note issue, that is, the power of a central bank to issue notes not fully covered by bullion, is an auxiliary measure. The central bank system becomes more pliable and safer by this addition because, the lines being less rigid, the fear of reaching the end of the tether is not so great; and, furthermore, since the result to be reached is not exclusively dependent upon the discount rate, the latter need not be changed so often and so drastically as with an inelastic system.

To return to our metaphor: note issue represents an auxiliary reservoir. Where it does not exist, the men in charge of the central reservoir have to advance the price for water so as to discourage extravagant use whenever the available supply falls below a safe margin. Unsecured note issues enable the managers to use this auxiliary supply, which renders it possible often to provide for the needs without increasing the price for the water, where the increased demand is normal and only temporary.

To decide when to supply water freely, when to warn the consumer to save, and when to limit the supply without ever refusing to comply with legitimate demands, is the duty of the central bank. No automaton—no tax or fixed regulation—can perform it, but the best judgment of the best experts must indicate the policy to be pursued from time to time. In addition, it must be the exclusive care and responsibility of one institution, chartered and constructed for the single purpose of maintaining the proper proportion between demand and supply.

With us the general banks, which are the consumers and represent the consumers, are at the same time the regulators. Where everybody regulates himself, there is anarchy and chaos in times of stress. Money making and the maintenance of a safe proportion between cash and cash obligations are at times distinctly opposed functions, and the performance of these functions should lie in entirely separated bodies. The general banks must remain money-making concerns, administered with the full responsibility of being able to meet all pos-

sible cash demands by available cash credit. To guarantee that every cash credit can be met, if desired, by actual cash payment, and to avoid the possibility of such general demand for cash—this is the function of the central bank.

Let us consider whether these aims of a central bank can be safely and effectively reached under the system above outlined. The great difficulty in the United States is the complete lack of modern bills of exchange, freely indorsed by the banks and passed on from hand to hand, as in Europe. With us there still prevails the old single-name promissory note, which, under our present system, is practically unsalable once it has entered the bank, and which therefore immobilizes our bank holdings.

To permit the banks to rediscount these promissory notes with a central bank would be the easiest way, but the criticism may be justly raised, that in doing so we should open the door to abuse. Hence the inclusion, in a scheme previously outlined by me, of the banking associations, which, having to guarantee the paper before it enters the United Reserve Bank, would carefully examine and sift it. The interjection of the banking association would make the paper safe beyond peradventure and, if nothing else could be found or agreed upon, this system might well be adopted for the present.

The criticism, however, has been raised against this method, that it would be fairly clumsy and that in normal times the banks would try to do without it. Therefore it would remain only an emergency system, out of touch with the market in normal times. To meet this difficulty, it is proposed in this plan to empower the United Reserve Bank to take directly from members, without the guaranty of the banking associations, bills with not more than twenty-eight days to run.

This thought developed from the following observation: Upon examining the report of the Reichsbank one finds that on December 31, 1908, it held in German bills M. 1,032,000,000; of which 44% were payable within 15 days, 17.4% within 16 to 30 days, 24.8% within 31 to 60 days, and 13.9% within 61 to 90 days. This brings out the surprising fact that the maturity of 61.4% of all the bills held by the German Reichs-

bank was of 1 to 30 days. The average duration of all bills held by the Reichsbank is thirty-four days. A similar proportion could be shown by the Banque de France, where the average duration of all bills held is even less, namely, twenty-four days.

How is this to be explained? It means that if, when making up its daily balance sheet, a German or French bank finds that on balance it needs money, it will send to the Reichsbank or Banque de France for discount its bills falling due the next following days. These central banks have a complete schedule for each city where they have an office, stating the minimum number of days that will be deducted at the bank rate, without any further charge for collecting the bill. To illustrate this procedure: the Reichsbank in Berlin will charge on a bill beyond M. 5,000 a minimum of four days for bills on Berlin, a minimum of five days on Hamburg, Bremen, Frankfort, and similar cities, a minimum of ten days for smaller bills on small and remote towns. This means that when the rate for call money and the bank rate are about even, a Berlin banker will send his bills on Hamburg to the Reichsbank for collection five days before the bills mature; if he collected them through his own correspondent in Hamburg, he would lose one day's interest at least, which would be consumed by the return trip of the money after the bill had been collected; and the longer the distance, the larger the loss of interest. When money is very easy, it pays the banks to lose that day's interest, and collect the bill themselves, since, instead of submitting to a discount of five days at 4%, they might pay on call six days at 2% or 3% and still fare better. This illustrates how, by keeping its rate higher than the ruling interest rates, the central bank withdraws its funds from general business and accumulates reserves for times when stronger demands arise. The stronger this demand grows, the longer will be the bills which are being sent for discount to the bank, until they reach the permissible maximum of ninety days.

A consideration of these facts brought up the question as to whether it would not be feasible and conservative to allow such institutions as may be admitted to dealings with the United

Reserve Bank to rediscount with it directly, and without the intervention of the banking association, legitimate paper having no more than twenty-eight days to run. It would appear that this could safely be permitted. A bill which has only a few weeks to run embodies a much smaller risk than one having three months to run. General conditions and the standing of the bank offering the paper for discount, and of the maker of the note, can be judged with a fair degree of safety for a few weeks ahead. The United Reserve Bank would make it a rule not to buy thirty-day notes issued for the obvious purpose of being immediately rediscounted and renewed at maturity, but to acquire only paper originally issued as 2, 3 or 4 months' paper, in accordance with the usages of the trades in question. The bank examiners would be trained to ascertain infractions of the rule and, besides, the United Reserve Bank would notice them immediately when the new bill was offered for discount so promptly after the expiration of the old note. The shorter the maturities of bills, the stronger would be the United Reserve Bank's position.

While this plan would be of immense advantage to the banks inasmuch as it would enable them without difficulty to turn into cash at once about one-third of the bills which they have discounted, at the same time it would not encourage reckless banking or speculation. No customer and no bank will dare to enter into extended commitments on the strength of an advance of twenty-eight days. What will happen after this lapse of time one does not know, and he must be prepared for possible retrenchment by the United Reserve Bank.

Moreover, some rule would have to be established that the aggregate amount of such short bills sent in for discount by any bank should not exceed a certain percentage of its capital and surplus, and that the aggregate amount of paper sent in for discount issued by one individual or concern should not exceed a certain part of such surplus and capital. This method would appear to be entirely safe; if deemed necessary, the twenty-eight-day limit might be reduced to twenty-one days. In the writer's opinion a twenty-eight-day limit is conservative.

We should then have one rate at which the branches of the United Reserve Bank in the banking association cities would take short bills directly from members, and one rate, possibly the same, at which they would take longer bills from members with the guaranty of the banking association.

There remains to be established one more rate, the private discount rate, at which the United Reserve Bank would take sixty- or ninety-day bills, drawn by commercial firms on, and accepted by, a bank, trust company or private banker [as under (4)]. The private discount rate of the United Reserve Bank would be kept very low in the beginning, for the purpose of encouraging shippers at home and abroad to use the credit of American banks, where now they use foreign credit. Shipments of coffee from Brazil to New York and of cotton from Galveston to Boston are now usually financed by long drafts on Europe. Under this plan such banking transactions will be turned over to the United States. Bills will be drawn on Amercan banks and bankers, instead of on London, Paris or Berlin, and instead of being financed by others we may gradually become the financers of others. Not only will this increase our trade, but most important of all, once we establish the modern banking bill in the United States, its use will grow and our banks will reap the tremendous advantage of being able to invest their deposit money in assets upon which they can quickly realize at home and abroad. As the use of this modern paper increases, so will the financial safety of the banks and the business community.

These bills will be strictly commercial in character and it will be an easy matter to scrutinize the legitimacy of their origin. At least two well-known banks, trust companies, discount companies or bankers must accept or indorse them, and one of these names should be that of a member of a banking association. This is much more than any European central bank requires, and it should be entirely sufficient to provide against any political or financial danger in this respect. On the other hand, the powers given are far-reaching enough to bring about the most important change, *viz.,* the creation of modern American bills of exchange.

There remains to be considered one more field of activity for the United Reserve Bank; that is, its privilege of buying foreign bills having not more than ninety days to run. This power is necessary for obvious reasons. It would afford the United Reserve Bank an opportunity to employ its idle funds in times when the management should decide upon a policy of withdrawing funds from use in the United States, and it would enable the bank to accumulate an interest-bearing gold reserve; for foreign bills are available for the purpose of drawing gold from foreign countries, and they also serve as a means for warding off withdrawals of gold.

We now have a fair outline of the normal functions of the United Reserve Bank. Though restricted in its dealings to the utmost limit of safety with respect to its scope of transactions and to its circle of clients, its effect will be most far-reaching.

The cash reserves now scattered and useless will be concentrated into an effective central reserve. The general banks will hold a sufficient amount of till money for their requirements, but as a reserve they must hold a cash balance with the United Reserve Bank, commensurate as at present with the aggregate amount of their deposits. If cash is withdrawn from the general banks, they in turn will draw on the United Reserve Bank for their needs and will replenish their balance by sending to it for discount short or long bills. As a result the dreaded cash withdrawal will lose its terrors for the banks.

If a Chicago bank withdraws its balance from a New York bank, all the latter has to do is to notify the United Reserve Bank's branch in New York, by a transfer check, to transfer the amount in question from the account of the New York bank to that of the Chicago bank. Wherever branches of the United Reserve Bank are established, the wasteful remittances of cash between members will cease. The bank will act like a huge clearing house for the settlement of balances between various sections. Millions are now constantly in transit, moving to and fro, crossing and recrossing one another in opposite directions. Hundreds of millions are kept in scattered balances, which can be centralized under the new system.

While banks now immobilize their assets by buying commercial paper which is legitimately issued, but which is practically non-negotiable, and while they use for quick assets call loans on the stock exchange, that cannot be called in a panic or a time of stringency which falls short of panic, the new system makes commercial paper a quick asset which can be converted into a cash credit or into actual cash. Our present scandalous system, of attempting to regulate the money market of the entire country by first pouring money into the stock market, and then withdrawing it, creating inflation and exorbitant security prices, followed in due course by stringency and unnecessary price depression, will give place to more orderly movements, as our discount markets develop.

This plan would be incomplete if it did not touch upon, without discussing in detail, the question of the government bonds and the notes issued against them by the national banks. It is certain that this question must be dealt with in a way entirely fair to the national banks. Otherwise they will oppose the plan. Having bought these bonds under the note-issuing privilege, they are entitled to due consideration if this privilege is to be withdrawn. It is most opportune that, whether we want a central bank or not, our miserable system of bond-secured note issue has at last come to a fatal *impasse*. One of the most beneficent influences of the construction of the Panama Canal is that it is opening our eyes to the impossibility of linking together the aggregate amount of the funded debts of a great nation and the aggregate amount of currency in the pockets of the people. There is no doubt that this foolish inflation of our currency and of the price of our government securities must now stop. There is furthermore no doubt that elasticity means expansion *and contraction* and not expansion alone, as results from our present currency system.

In order to secure an elastic currency and a safe basis for a United Reserve Bank, we must reduce our outstanding currency somewhere, so as to substitute the new elastic note issue —an issue that will contract, so that it can expand with safety. One way would be an inverse conversion; that is, a gradual withdrawal of the existing note-issuing power with a simul-

taneous conversion of our government bonds into obligations bearing a somewhat higher rate of interest, thereby safeguarding the banks against a loss in the price of their bonds. This would bring the price of our bonds to a normal level, like those of England, France and Germany, whose people can afford to hold government securities. The higher interest rate to be paid by the government to the people would be the most wisely spent money in our entire budget. There are several other ways of dealing with this problem. Suffice it to say here, that to solve this part of the problem does not offer insurmountable difficulties. It will be necessary only to investigate which method is the best, and offers the least resistance.

II

Let us now turn our attention to the criticisms of those opposed to a central bank system in the United States.

Mr. Morawetz says[1] that the territorial expanse of the United States is too large for such a system, that the bank would be one of too "colossal magnitude" and that it would be necessary to place the central bank in a position to regulate and control financial conditions throughout the country. He furthermore claims that the central bank would either "have the power to discriminate," and therefore "the managers would be placed in the attitude of beneficent dispensers of bank credit and of prosperity" or, if properly restricted, the bank would be "a penny-in-the-slot machine for obtaining credit," the resources of which might be drawn upon too heavily by "banks engaged in speculative business or located in sections of the country where interest rates are high."

The size of the country is an argument not against, but for, a central bank system. A small and unimportant country could live with a less perfect system, and could lean upon the other central bank countries in times of need. The immensity of our country, our resources and our transactions renders it

[1] Victor Morawetz, *The Banking and Currency Problem in the United States,* The North American Review Publishing Co., N. Y., 1909; and *Address on the Banking and Currency Problem and the Central Bank Plan,* delivered at the Finance Forum of the West Side Y. M. C. A., Nov. 24, 1909.

absolutely necessary for us to adopt the most efficient system in existence.[1] The greater the area, the more perfect the system must be in order to reach every remote point. The plan here outlined covers the whole country. Each section of the United States, as a matter of fact, will have a central reserve bank of its own, where directly—or indirectly through its correspondents—each bank in the United States will enjoy the advantages offered by the United Reserve Bank. While the general policy will be settled at the head office, in consultation with the presidents of the branch offices and the members of the central board, the actual business will be done by the branch offices, which will act as separate units for each section.[2] There will be this most important difference, however, that, as far as reserves are concerned, they will be united and act as one. The surplus of one section will be available for other sections and the interests of all together will bring about the general policy of the United Reserve Bank. The effectiveness of this plan would not be interfered with by a provision that the discount rates of all the branches need not necessarily be the same. Thus it might be possible to meet undue expansion in one section of the country by increasing the rate of that branch without increasing the rate for other sections.

As outlined here, the United Reserve Bank will not be a "penny-in-the-slot machine," any more than the European central banks, which discount and advance upon uniform conditions published from time to time. The United Reserve Bank would certainly have the right to refuse any paper that did not appear safe or legitimate. Furthermore, the power to increase or decrease its rate and its circulation would place it in a position amply to protect itself and the country. At the same time, the restrictions placed upon it absolutely preclude

[1] Our weight has become too heavy and threatens at times to break the European machinery which we use to make up for the lack of elasticity in our own system.

[2] Even the banks at Washington, D. C., would deal with the United Reserve Bank only through a local branch office, like all the other banks in the country.

any danger of its becoming "a beneficent dispenser of bank credit and prosperity." The fear that some section, where interest rates are high, might absorb all the available means of the United Reserve Bank, may be dismissed from consideration. The proportion to be fixed between capital-and-surplus and amount admissible for rediscount with the United Reserve Bank would prevent such abuse. Besides, as this facility of rediscount is a most valuable element in the strength of a bank and its real reserve, no conservatively managed institution would go to its full limit in normal times. An institution known to abuse its rediscounting privilege would quickly lose standing in the community.

Mr. Morawetz's next criticsm is directed against the "control of the bank." It is contended that there would be too much one-man control, or control by a group; that the bank might become involved in political strife or become the issue between contending political parties. The first two points we have already answered at length, and little remains to be added in this respect. The central office would merely indicate the policy; the branches, which practically are under the supervision of the local banking associations, would undertake certain well-defined, safe transactions, into which no element of politics could enter, any more than it enters into our clearing houses. No political patronage whatsoever would be connected with the United Reserve Bank. A conscientious and honest man, not even brilliant, would be required to fill the presidency, at the pleasure of a board which, as we have seen, would be made up of the best men the various banking communities could secure as delegates. There is no reason, despite our critics, why such a board should not work harmoniously and effectively, and whoever examines the plan from an unbiased point of view will see no danger of excessive power being vested in one man.

Mr. Morawetz claims that great disaster would follow if the central reserve bank, once established, should be abolished again. Quite true; but should we hesitate to build a water reservoir, because we feel that it would be a calamity if one day it were to be removed? It is safe to say that if a system

were established as safe as the one here outlined, it would develop as our country develops. Its requirements might change; but just as little as we can go back to the old mail coach after the railroad, just so little can we return to our present impossible system, once we have modernized it. If frauds or patronage fill the post office or the custom house or the army and navy or the treasury, we should clean up but not abolish those departments. Though it is difficult to perceive how under our plan abuse could develop, in such a case we should clean the house, but we should not destroy it. Mr. Morawetz concludes his argument by saying that a central bank should not be tried because if it should fail, the cause of true reform would be postponed for a generation. In so doing, he reminds me of a man who should refuse to be born, for fear that he might die!

Now let us analyze Mr. Morawetz's plan.[1] Under it, Mr.

[1] [At the request of the editor, Mr. Warburg left this section as written in the spring of 1910, though Mr. Morawetz later modified his plan in some particulars.—Ed.] Mr. Morawetz's plan provides for so-called "note-issue associations," embracing practically all the national banks of the country. The banks will appoint a board of managers, who in conjunction with the Secretary of the Treasury will have authority to establish branches wherever they deem it advisable, the main office of the association being at Washington.

The main function of the central office and the branches will be to regulate the issue and redemption of notes. Each national bank will be entitled to issue against its general assets an amount of notes equal to its capital stock. The board of managers, however, has the right to increase the amount of note issues of the banks to some fixed percentage of the capital stock of the banks, and this board also has the power to reduce such increase as it may have authorized. Each bank having taken out notes will be required to keep on deposit with the association, as redemption fund for their payment, a sum of lawful money equal to such percentage of the notes as may be prescribed from time to time by the board of managers and the Secretary of the Treasury. The required percentage of the redemption fund will be fixed from time to time by general order applying equally to all the banks, but the required percentage will never be less than 20% of the outstanding notes. It is left open for further discussion in the plan whether each bank shall receive a special note issue and shall keep a separate redemption account, or whether it will be practicable to have one joint issue and one joint redemption account.

The general idea of the plan is that when notes are issued, they shall be covered by a substantial amount of cash to be set aside in the redemption fund, let us say 40 to 70%. The board of managers will have the power, in times of stress, to allow a reduction of this reserve in the redemption fund, which, however, may not be lower than 20% and in times of easy money, the central

Morawetz provides for a board of managers, to be elected by the banks. This board, in conjunction with the Secretary of the Treasury, will have the right and duty of dictating to every bank in the United States what percentage of cash it must hold against its outstanding notes.

We grant that such a board could be so constituted as to be safe; but every argument raised by Mr. Morawetz against the dangers of political or one-man control of the central bank board, can be applied with equal force to his board of managers. However, the power of this board of managers is more far-reaching and of broader scope and therefore more dangerous than that of the board of the United Reserve Bank. While the central bank is a passive institution, Mr. Morawetz's board of managers is an active institution. The central bank establishes rates at which it is willing to do business, but it does not force anybody to do business with it. If the bank rate should be 5%, banks in the South may find it to their advantage during the cotton crop movement to rediscount with the United Reserve Bank, while banks in New England may for the time being dispense entirely with its services, and therefore not be affected. If, however, the board of managers, under the Morawetz plan, issues its command that all banks must increase their reserve against notes from 30% to 40%, it is a direct interference with the business of every individual bank in the country, no matter if money is easy in Boston and tight in New Orleans. Expansion and contraction is ordered, whether it is needed or not, for every one at the same time. How about "expanse of territory" in this case? Is it possible to regulate all the varying demands of the varying sections of our immense country at the same time by one "You must!"? It is Mr. Morawetz's "You must!" against the United Reserve Bank's "You may!" This difference is most important.

Furthermore, while the United Reserve Bank is enabled to

board may decree that this redemption fund be increased up to 100%, so as to withdraw the notes, finally, from circulation.

The plan provides for the withdrawal of all national bank notes secured by government bonds. Some provision has been made to protect the bonds owned by the banks.

perform its functions by the freest return of idle money into the central reservoir, thus avoiding its being needlessly held in separate reservoirs, Mr. Morawetz would force every one at the same time to withdraw more cash and to lock it up as special collateral for new notes. This power to influence money rates, vested in a few men, would, from Mr. Morawetz's own point of view, form a grave danger.

Leaving aside this phase of the question, the system is unsound for these further reasons:

(1) Our examination of modern systems has shown that note issue is only a side question. It is a poor plan, therefore, to try to solve the main problem by attacking an auxiliary part of it. It is just as unsatisfactory as the attempt to repair a broken-down dynamo by readjusting the storage battery attached to it only as an auxiliary emergency device.

(2) Notes issued by banks must be considered as demand deposits, since for both, payment in cash may be demanded. It is an unfair and unscientific plan to secure one depositor by 50% or 60% of cash, while the other must be satisfied with 20%.

(3) It is a faulty system that will change practically the whole outstanding currency carried in the pockets of the people into money which the banks may not hold when it is paid in to them.

(4) It is an anomalous and unsound system that allows a bank to pay its creditors in notes which it may not carry as reserve, or that forbids it to carry as reserve against a deposit, notes the very receipt of which may have created such deposit.

(5) The Morawetz plan tries to solve the problem exclusively by issuing more or less currency. But it is cash credit, not currency, which is required most frequently. The two are not identical.

(6) A bank is safe in granting time loans against time money which it may have taken; the excessive granting of time loans (loans and discounts) against call loans (deposits) is dangerous and often the cause of financial disturbances. A bank already overextended, makes its condition more dangerous by granting further accommodation through note issue.

For increased note issue means an increase of demand obligations, while rediscounting of paper with a United Reserve Bank means an outright sale of assets. That is, cash credit or cash becomes available without the creation of a new and dangerous demand obligation.

(7) The vicious system of separated, disconnected and competing reserves remains the same.

This is only an outline of the main arguments against Mr. Morawetz's plan. It would lead too far to follow up in detail every single point.

What would the effect of this system be? There were in the United States in 1908, according to the report of the comptroller of the currency:

	Nat'l Banks	State Banks	Trust Co's	Sav. B'ks
Number	6,853	11,220	852	1,453
Cap. Stock	$921,000,000	$502,000,000	$278,000,000	$36,000,000
Surplus	566,000,000	217,000,000	370,000,000	244,000,000
Cash	889,000,000	308,000,000	118,000,000	44,000,000
Deposits.	4,374,000,000	2,937,000,000	1,866,000,000	3,479,000,000

Under the Morawetz plan, the 6,853 national banks, which are money-making concerns, competing against one another, with deposits of $4,374,000,000, would have to bear the burden of regulating not only their own conditions, but also those of the other institutions, having deposits of $8,282,000,000. But let us suppose the state banks all turned into national banks. We should then have 18,073 banks, with a capital of $1,423,000,000; surplus $783,000,000; cash $1,197,000,000; deposits $7,311,000,000. In order to bring the state banks up to the standard of the national banks, figuring only a 25% reserve, a cash reserve of $1,462,000,000 would be required, being an addition to bank cash that must be withdrawn from circulation of $265,000,000. Every bank will have the right to take out these notes to at least the amount of its unimpaired capital, and the board of managers may authorize larger issues. Let us take the minimum, $1,423,000,000, and a reserve of only 40%. This would mean an additional withdrawal of cash of $568,000,000, or a total of $833,000,000. This means

that two and three-fourths times the amount of cash held at present by all state banks, or about the total aggregate amount of cash now held by all the national banks, would have to be withdrawn from circulation and be replaced by bad notes—bad because they cannot be used by the banks as reserve money. Taking the above figures as a basis, it means that there would be in the hands of the public about $1,400,000,000 of national bank notes, while the circulation of such notes under our present system amounts to about $700,000,000.

When there is a demand for more currency, and not for more credit, the plan may work for a while, though weakening the currency; but when there is currency enough in the pockets of the people, while demand for additional credit continues, every note issued will return at once through the redemption fund and must be paid in cash. Every bank will then try to accumulate legal-tender notes, to strengthen its power of granting credits, and will therefore at once present for redemption the national bank notes that it receives.

Crises have frequently arisen because people believed that the top wave of demand for accommodation had passed, and all means had been spent in this expectation, when the main pressure had not yet begun. If during such critical times gold withdrawals from abroad should begin, it is difficult to see how under this plan reserves could be strengthened, for it is to be expected that in such case the reserves would already be at the lowest point. Then we should again witness the critical times when one bank, by refusing to renew its call loans and thus throwing the burden on the others, creates a credit balance for itself in the clearing house, thus strengthening its cash balance at the expense of the others. Retaliation would follow, and panic would be in sight in the future just as it has been in the past. The weakness of our present system in this respect would remain unchanged.

This plan would leave the treasury money either wastefully piled up and withdrawn from circulation, or it would leave to the Secretary of the Treasury arbitrary power to dispense favors by depositing the funds wherever he may prefer. It would leave promissory notes as immovable in the future as in the

past, with no hope of ever developing a modern system of bills of exchange. I have no hesitation in saying that it would be a most reckless experiment, on entirely new and untried lines, and it would in my opinion lead to certain disaster.

Mr. Morawetz's plan contains two suggestions: one, as we have seen, being the regulation of reserves against note issue, and the other being the creation of sectional reserve banks. It is greatly to be regretted that Mr. Morawetz has emphasized the first scheme and touched only slightly upon the second. It is sincerely to be hoped that he will work out in detail this plan for sectional reserve banks, which he desires to be at all times in a position to furnish reserve money to the several banks in their sections by paying checks drawn against the deposit accounts of the banks or by rediscounting paper offered by them for that purpose.

I am confident that Mr. Morawetz will soon reach the conclusion that these sectional reserve banks must be endowed with all the powers and charged with all the duties given under our plan to the United Reserve Bank branches; otherwise they will be nothing but safe-deposit vaults, which will have to hold for each bank the exact amount of cash received from it for safe keeping. They can not go a single step further without incurring the gravest danger unless they have some central bank to fall back upon, or unless they are themselves central banks, that is to say, disconnected central bank branches. Mr. Morawetz tries to cover the weakness of decentralized reserves by providing that the several sectional reserve banks be authorized to make arrangements with one another in order to facilitate exchanges between different sections of the country. But there must be more than this authority to make arrangements with one another with a view to facilitating these exchanges. These sectional reserve banks must in the end act as a unit. Otherwise we shall have a recurrence of our experiences at the end of 1907, when one reserve center closed itself against the others, when enforced credit was established *within* each financial center, indeed, but when New York, Chicago, Philadelphia, Boston, Pittsburgh, and all the others, would not accept even the joint obligation of all the banks of their sister cities.

Obligations between cities remained payable in cash, and distrust among these centers brought about the actual phase of the gold premium and the long period of general suspension of cash payments. Should a common foe attack Boston and New York, would Illinois keep her soldiers at home, or would she differentiate between Boston and New York? The knowledge that all will stand together gives a feeling of confidence and safety. It is the same with our financial reserves: they must be held united under one direction, to be thrown where they are needed and to be withdrawn from places where they are superfluous. The joint credit of the nation must stand behind the reserves, insuring unlimited confidence that nothing will be able to shake.

There must be one big reserve, one note-issuing power, one big bank, which will be neutral, administering impartially and economically the funds of the treasury of the United States, and issuing notes that are good enough not alone for the people, but also for the banks to be counted as cash. Instead of 20,000 institutions carrying an average of 8% cash against their deposits and notes, what we need is one big institution with a capital of $100,000,000, acting as reserve for all and maintaining a normal reserve for its notes and deposits alike of probably 80% instead of 8%. By following the central bank plan and adapting it to our conditions, we know with certainty that we are following along lines which have been thoroughly tested elsewhere and have led to success everywhere. Therefore, even with equal advantages otherwise, the central bank plan should prevail.

In fairness to Mr. Morawetz it ought to be stated that he has never denied the superiority of the central bank system. In fact, he advocates its adoption wherever it can be done with safety, but he believes that our peculiar conditions render it impossible to evolve a plan which will be at once safe and effective. Fear of a dangerous centralization of power has led him to prefer an attempt to control a scattered note-issuing power and has induced him to advocate separate sectional reserve banks rather than an actual unification of reserves.

The object of this essay has been to show that these half

measures will not afford adequate relief and that they invite, and even to a larger degree, the very dangers which are supposed to be inherent in the central bank plan. On the other hand this essay has been designed to prove that it is possible to evolve, on the sound principle of a central bank, a plan which will not only be effective but at the same time meet the difficulties which Mr. Morawetz has so forcibly pointed out. Through his criticism he has helped us gradually to perfect the present scheme, and now that we have perhaps succeeded in meeting his objections, we trust that he will continue to help, not only by criticism, but by coöperation in further developing the scheme on lines which he himself has recognized as at least ideally the best.

III

Professor Sprague has published an article entitled "The Proposal for a Central Bank in the United States: A Critical View." [1] The conclusions which the author reaches in this essay are as follows:

> A central bank does not appear to be either required or well suited to relieve our financial difficulties. On account of the absence of branch banking it would not be able to handle the government funds in a satisfactory fashion, or to provide an elastic note issue. *Branch banking is an essential preliminary, if we are to have a Central Bank of anything like the European type,* and there are powerful objections to such a change, the discussion of which does not fall within the scope of this essay.

Neither from the historic nor from the practical point of view is this conclusion correct. Effective central bank systems existed in Europe before the branch-banking system was evolved. The Bank of England was organized in 1694, the Banque de France in 1800, the Bank of the Netherlands in 1814, and the Bank of Austria-Hungary in 1815. In all these countries the central banks performed their duties effectively during a period when banking concentration in the modern

[1] *Quarterly Journal of Economics,* vol. xxiii, May, 1909.

sense had not begun and when private banking firms were still transacting the main banking business. The phenomenal growth of the joint stock banks, the absorption of private firms, and the all-embracing development of the present branch-banking system are an evolution which has taken place in Europe almost entirely within the last thirty years, and which reached its present predominating importance only within the last twenty years. The evolution of branch banking is not incidental to a central bank system, nor is the central bank system the outgrowth of branch banking. Branch banking, in its present form, is incidental to the unlimited power of expansion and concentration which followed the evolution of the modern stock company, the corporation.

From the practical viewpoint it is a mistake to think that branch banking is a preliminary step essential to a central bank system. The influence of the central bank is stronger with a system of small and disconnected banks than with enormous branch-banking organizations which, singly or combined, are so powerful that at times they are able to pursue a policy of their own in contravention of that of the central bank. While it is true that when these banks coöperate with the central bank, the latter may accomplish more immediate results, the fact remains that these larger institutions are able, at times, to emancipate themselves entirely from the influence of the central bank and that when in the end they are forced by circumstances to fall back upon the reserves of the central institution, the sudden weight is such that the central bank finds it difficult to carry the burden.

Enormous banking concentration has been watched by the managers of central banks with a feeling of concern rather than with a friendly attitude. The central banks look upon the independent and smaller institutions as their most loyal followers, and the central banks stand, as a matter of fact, as protectors for the smaller institutions against the aggression and the overpowering influence of the larger ones. However, the jealousy between the large banks and the central banks, sometimes prevailing in Europe, need not exist with us, since in Europe the central banks compete, to a certain degree, with the

general banks; a situation which would be avoided by us under the present plan. One might dissolve to-day all European branch banks into the many independent banks and banking firms which originally constituted these big concerns, and the central bank system would not suffer in efficiency from such a change. One might eliminate all the branches of the central bank, and the central bank system would still remain efficient though it would achieve its results in a somewhat slower, less direct and hence less economical manner. On the other hand, the elimination of the central bank system in England, France or Germany would force the smaller independent banks to surrender at once to the big banks. Without the protection of the central bank they could not survive.

The basis of the central bank is the centralization of reserves and what Professor Sprague calls "the fluidity of credit." Eliminate these two, and the central bank system must fail. Professor Sprague says in respect to this:

> The fluidity of credit is absent in this country, and will remain absent while we wisely continue to prefer banks managed by persons with extensive local knowledge to branch banks subject to bureaucratic managers, acting under general rules laid down at a distant head office. For this reason we cannot expect our money markets to be subject to the comparatively slight and distant influence exerted by a central bank. It would be necessary to concentrate bank reserves to such an extent that every banker would feel that his safety depended upon the situation of the central bank.

To begin with the last sentence of Professor Sprague's observations, it has been shown in the previous chapters of this essay that the absolute concentration of banking reserves into one central reservoir is the very foundation on which a modern structure should rest, and there can be no doubt that every banker in the United States would be satisfied as to the absolute safety of reserves under such a system of centralized reserves, for which, as a matter of fact, the credit of the entire United States would be pledged.

Professor Sprague's suggestion that fluidity of credit is based upon branch banks cannot be admitted. What does

fluidity of credit mean? The very expression points to a credit that is liquid; it means the very thing to which I have so often and so insistently drawn attention, the question of rendering liquid the assets of a bank. Whether we had branch banks or not in the United States, the present system of issuing and handling American bills, which form non-liquid assets in the hands of the banks, would stand in the way of fluidity of credit. A central bank in the United States, even with a fully developed branch-banking system, can not effectively perform its duties unless we find some way of making these immovable promissory notes movable instruments of credit. The object of this essay is to show how a central reserve bank system, as here proposed, could fill the present need in this respect, and pave the way for further development in the right direction. Professor Sprague's main arguments are based upon the mistaken idea that a central bank in our country would need thousands of branches in order to *deposit* equably all over the country its own and the government's moneys and in order to *distribute* impartially its notes among the banks.

To quote his argument in this particular:

The manner of putting this vast sum (being the balances of the United States government) into general use would be equally without precedent. Without doubt there would be a general demand that the deposits be used with a general degree of approximation to population and the supposed needs of different parts of the country. At this point an insurmountable obstacle would be encountered. To lend directly to the business community would require an impossible number of branches. Lending at the relatively small number of branches which we have assumed might be established would not accomplish the purpose.

In order to distribute its funds widely, the central bank would be obliged to lend to at least as many banks as there are localities; and, since the selection of a single bank would give rise to charges of favoritism, the bank would be certain to lend to all the banks. The central bank would be obliged to decide between the claims of 15,000 or more banks.

This shows an entirely erroneous conception of the activities

of a central bank in general and of our United Reserve Bank in particular. Under our plan, the central institution would neither deposit moneys nor distribute notes; it would discount paper and collect discounted bills as they fall due. Depositing moneys is an operation in which the initiative would rest with the central bank and in which the danger of favoritism might be lurking. For the operation of discounting bills at a published rate, the initiative rests with the general banks and, within certain limits, with all banks alike. The United Reserve Bank does not reach the banks, but the banks reach the United Reserve Bank; and the organization as here proposed would enable each bank in the country, directly or indirectly, to reach the central institution.

While as a matter of safety, economy and efficiency, a number of branches as proposed in our plan would certainly be advisable and feasible, there is no need for thousands of branches to reach every single point where banks are in existence. Professor Sprague evidently does not appreciate the spreading power of the discount rate. When promissory notes or "bills" become "bills of exchange," money for safe and legitimate purposes flows easily from one end of the country to the other, and the higher the development of the discount system, the more the spreading power of money will be felt and the safer our system will become. While our plan does not attempt to provide the highest degree of fluidity for the present, it will create conditions under which the spreading power of the discount rate will be felt at once, and that will insure efficiency for the United Reserve Bank and safety for the country.

We cannot imagine that the prices for staples will ever vary greatly between New York and San Francisco in spite of their territorial separation. The maximum difference would probably be the cost of transportation between the two cities. This is explained by the fact that we have established certain brands or standards as the basis of our dealings, which enable us to purchase and sell by letter or telegram without negotiating for individual bags or boxes which we sample and select. Without this method we should deal with necessities as we deal

with luxuries, paying for each article a fancy price, which price may differ widely in the various parts of the country, though the quality be the same. In this respect the bills receivable of an American bank are like a collection of curios, selected with care and pride by the president of each institution, but difficult of sale unless another collector is found who happens to be interested in the same article, and who does not possess too many of the same kind already. Bills receivable in Europe are like so many bales of cotton, bushels of corn, or bags of coffee, standardized, homogeneous articles, which can be sold at once. The discount rate of the central bank, on the strength of which the general discount market develops, is a potent factor in bringing about the creation of standardized bills of exchange. This evolution in the United States also will follow the establishment of a United Reserve Bank, which from the beginning, even with our present conditions, will be able to provide a fluidity of credit sufficient to make the plan effective.

When we conceive clearly the fundamental ideas underlying the working of a central reserve banking system, we see the lack of force in Professor Sprague's argument that "our difficulties would appear, as in the case of government deposits, as soon as the attempt was made to place the notes where they were really needed,—in agricultural sections of the country," in view of the difficulty which he foresees, that the banks generally would be too eager to secure these notes and use them as reserves. Under our plan a balance with the United Reserve Bank is equivalent to cash in hand, and therefore there will not be an eagerness to secure any notes, except as they may be required for actual circulation.

Professor Sprague appears inclined to think that a further danger inherent in a central bank scheme would lie in the direction of increased expansion. Under existing conditions, in his opinion, the risk of undue expansion could be averted and "normal seasonal variations in credit requirements could be readily met if our banks were less given to the habit of lending to the full extent of their resources in months when the course of business gives them an abundance of cash." His final

recommendation is that the six largest New York national banks should hold reserves of 30% in times of financial quiet, and that they should use these reserves freely, without considering the 25% limit, in times of financial disturbance. Incidentally the suggestion is made that reserve banks and central-reserve banks be not allowed to pay interest on bankers' balances. These suggestions are coupled with a curious panegyric, praising the use of the clearing-house certificate, with a somewhat disguised recommendation of partial suspension of payments as a legitimate means of meeting extraordinary demands, and with an attack on the New York banks on account of the "ignorance of our bankers of the only method which experience in other countries has shown to be uniformly successful in allaying financial panics." The method here referred to by Professor Sprague consists in meeting unreservedly, by freely paying, any demand for cash made upon the banks. In this respect he makes the following statement:

> We already have far more centralization of banking power in New York than is generally realized. Before the crisis of 1907 the six largest New York national banks held net bankers' deposits of $305,000,000 out of a total of $410,000,000 of such deposits held by all the national banks of the city. It is somewhat disconcerting to find that these banks, which held a reserve of $140,000,000 in August, 1907, still held $110,000,000 in December, 1907.

No stronger argument can be made in favor of a central bank than is contained in this statement. Once a panic begins under our present system of decentralized reserves, there is no other means of salvation for reserve and central-reserve banks than to stop payments. In their anxiety the country banks, which held $305,000,000 of balances in New York, would have withdrawn the entire $140,000,000 available in New York in August 1907, and while this process of diminishing reserves in New York was taking place, it stands to reason that the demand for cash within New York by the other depositors of the New York banks would have increased at the same dangerous rate. A system of decentralized reserves without any provision for transforming cash credits readily into cash must

inevitably come to grief in a period of distrust, no matter whether the New York banks keep reserves of 30% or 25% in easy times.

Professor Sprague does not appreciate the difficulty these six banks would have in realizing when conditions for legitimately decreasing the reserves actually prevail. These banks are primarily money-making concerns; if, during times of strong demand for accommodation, they should refuse to grant it and call-money rates should rise to extraordinary heights—as they inevitably must under our present system—these Wall Street banks would be accused at once, as they always have been in the past, of greed and manipulation. If they should meet the demands, yielding to such clamors, their reserves would soon diminish, and conditions would remain as heretofore. When the panic came, as come it inevitably would, it is more than probable that the reserves of the banks would already be below 25%.

Furthermore, if we carried out Professor Sprague's suggestion, that the central-reserve banks should not allow interest on deposits by other banks, the immense balances kept by country banks in New York would cease, and the restrictive power which Professor Sprague wants to apply to these banks would thereby become void. These large amounts are not kept in New York for the sole purpose of acting as a safe reserve, but they are sent to New York to act as "on call" assets which at the same time earn interest. It is for this reason that Professor Sprague's remarks are not justified when he says: "The failure to adopt proper methods seems to be due not so much to inability as to a failure to recognize the responsibility of their position by the New York banks which hold bankers' deposits." Country bankers demanding interest on their balances cannot expect to have them kept in cash.

It is strange that a writer searching for remedies on the lines of the above suggestions should find fault with the central bank plan, for the reason that, as he believes,

> it would not be able to exert a restraining influence upon the expansion of credit, because it would have no means of carrying out a pre-

cautionary policy. Is it not certain that, in the eager search for funds in times of active business, the other banks would resort to it for heavy loans? Doubtless a considerable measure of accommodation would have been thus granted if we had possessed such a central bank in the years before the crisis of 1907, even though it had been managed with far more conservatism than we have any reason to be certain of securing at certain times. Every dollar thus borrowed would have been an addition to the extension of credit at a time when restraint was needed, not expansion.

The central bank would have been creating a certain amount of credit expansion, which its later power of contraction could certainly not have exceeded, and probably could not have equaled, because the volume of credit cannot be largely diminished without serious disturbances. The power to issue notes by a bank of this kind would be a positive evil unless it were strictly reserved for use only upon occasions of actual emergency.

It is evident that a central bank managed with the single object of watching expansion and contraction, and of maintaining the safe proportion between cash and cash obligations, a bank which cannot be swayed in its policy by any prospect of gain, and a bank the management of which is not subject to the immediate pressure brought to bear by the customer in need of accommodation, will be in a vastly better position to form a clear opinion concerning the large point of view of the country's financial conditions than a local money-making bank. The central bank would not be subject to the same temptations nor to the same attacks, in case it should deem it necessary, in order to force general contraction, to insist on higher discount rates; but, incidentally, its very existence would prevent the exorbitant rates which from time to time are inevitable under our present system.

Professor Sprague's argument that "the central bank would bring about exclusively further expansion of credit," would be sound only if we did not provide for contraction at the same time and from the very beginning. A substitution of notes of the United Reserve Bank for either the bond-secured currency or the greenbacks presupposes from the outset that into our present ever-expanding currency we should inject a large

amount of currency which will contract and which must return to the United Reserve Bank the moment that this institution, in easy times, decided to collect its short bills without renewing its investment in them.

No European system provides, as our plan would do—as a logical development of existing conditions—that banks should maintain so substantial a proportion of their deposits as a cash balance with the central bank. This in itself is a regulator; and even if, on the other hand, owing to our present conditions, the United Reserve Bank did not have the same power as that enjoyed by the European central banks, thanks to the importance of the European discount markets, the combination of balances to be kept and transactions to be made with the United Reserve Bank in order to maintain these balances would give it a certain restrictive and regulative power, the possibility of which Professor Sprague denies.

From the practical viewpoint there can be no doubt whatever that the basis for a healthy control by a central bank must exist in a country where regular seasonal requirements cause, with almost absolute regularity, acute increased demands for money and accommodation. A country of this kind will require at given periods certain additional accommodation to avoid stringencies as now experienced by us from time to time, and will stand without disturbance the withdrawal of the additional funds after the seasonal demand has subsided. Because our present currency system is expansive only, and lacks the power of contraction, we experience the difficulty of meeting unusual demands whenever they arise. Why should we assume, on the one hand, that the best men to be found, when placed at the head of such an institution, would be unable to cope with the problem, and at the same time be ready to place the burden on the shoulders of the managers of the six largest Wall Street banks,—the very men whom Professor Sprague accuses of having proved entirely unable to meet the needs of the hour in 1907?

The same argument holds good with respect to the treasury funds. While denying, on the one hand, the ability of the central bank management to deal with the large funds of the

treasury in the guarded and safe way in which a United Reserve Bank disposes of such funds, Professor Sprague is evidently willing to let the Secretary of the Treasury continue as heretofore to dispense his favors as well as he can.

As to the wisdom of allowing the United Reserve Bank to issue "unsecured notes," the writer believes that under the plan here outlined it is not probable that for many years to come unsecured notes will be issued to any considerable amount, if at all. But it appeared advisable to endow the United Reserve Bank with this privilege, so as to imbue the country with the fullest confidence that cash will always be forthcoming. This confidence will be the very means of rendering unnecessary a large issue of unsecured notes.

It is impossible to reply to every single point enumerated by Professor Sprague. I have therefore singled out these fundamental arguments that needed refutation. But, in closing, let us touch upon one more point raised by Professor Sprague. It is evident that one of the functions of the United Reserve Bank would be to accumulate, in easy times, large amounts of foreign bills of exchange to hold as a gold reserve against emergencies. Professor Sprague believes that this would create anxiety in Europe. An accumulation of foreign bills of exchange would, indeed, give fair warning to the European central government banks that in case of a stringency arising with us they must be prepared to meet a sudden demand from the United States. But the foreign government banks would vastly prefer this danger, which amounts to nothing more or less than the perfectly legitimate collection of debts incurred by their own countries, rather than be subject to the violent attacks to which all Europe is now exposed when a panic is raging with us. There can be no doubt that the unwelcome presentation of a bill payable to the United States, but instrumental in avoiding a panic in the United States, would be much more satisfactory to Europe than a general suspension of payment with all the consequent terrors at home and abroad.

It is a rather amusing coincidence that in this controversy the rôles have apparently been exchanged. One would expect

that the professor's and lawyer's point of view would be that nothing can be sound in practise which is unsound in theory, while the banker's attitude might be expected to express itself rather in an attempt at patching up existing conditions by practical measures without much concern about the theory. The banker's view in this case is summed up by asserting unequivocally that no monetary reform will be sound and effective which neglects the theory of centralized reserves and fluidity of credit.[1]

IV

Some critics have raised the objection that a bank as here outlined would not earn its dividends. There cannot be any doubt that the United Reserve Bank will without difficulty earn a return on its capital in excess of 4% per annum. But we should bear in mind that this question of earning power is of very minor importance. If we want a bank which is not to be run for profit, but for the general weal; if we want to cede to the United States any profit in excess of 4% net; and if, at the same time, we want the stockholders to be satisfied with a 4% investment, we should be fully justified in proposing that the United States guarantee a return of 4% to the stockholders. Or, to express it in a happier way, it might be suggested that in consideration of the profits to be turned over to the United States by the United Reserve Bank and in consideration of the savings to be made by the United States in transferring the various disbursing and collecting functions from the treasury to the United Reserve Bank, the government of the United States should contribute to the running expenses of the United Reserve Bank such lump sum as will enable it to pay to its stockholders a dividend of 4% per annum. It is safe to expect that, once established, the United Reserve Bank

[1] Just as this essay is going to press, Professor Sprague has begun the publication of a new series of contributions in the *Quarterly Journal of Economics*, vol. xxiv, no. 2. He has here somewhat modified his recommendations, but before dealing with them, it will be necessary to await the appearance of the further chapters which are announced. What has been said of Mr. Morawetz, at the end of page 101, however, applies equally to Professor Sprague.

will become a permanent source of revenue to the government, and that important savings in its present budget will be effected.

One more word in closing. The thought is general, with people who have not studied the question, that a central bank is a step towards monopoly. The reverse is the truth. Wherever a central bank exists, it is the backbone of the independent institutions in their fight against the overpowering influence of the large stock banks, as they exist in England, France and Germany. It should be clearly understood that the United Reserve Bank, by creating safe conditions, would make the small banks independent, where they now have to rely, and are dependent for help, on the good-will of their big sisters or the often doubtful ability of the Secretary of the Treasury. A central reserve bank properly organized is not an oligarchic but a democratic institution; it would mean safety for all, hardship for none.

There is no good reason why the existing banks should oppose it. Wherever a central bank has been established the vested interests at first tried to prevent its creation. They saw only the danger of a change in business conditions which, though bad in general, had been profitable to them. They recognized only later that by the change they were enabled to transact their business in safety and that therefore they could do a much larger business. There is not one of these countries, in which opposition ran high against a central bank, where to-day a move to do away with the central bank system would meet with the slightest support. Neither the socialist nor the capitalist would dispense with it; it has become one of the fundamental parts of the economic life of modern nations, like the telegraph or the railroad.

Would it be repugnant to the so-called American spirit? Is it an un-American institution? Our opinion is that it is a slur and a slander upon the American people to say that they are morally or politically so utterly unfit that they cannot afford to adopt a system for which Russia, Japan, the Balkan States, and some of our South American sister republics have proved adequately prepared and which even China is seriously think-

ing of establishing in the near future. We believe that the people will wake up to the humiliation of present conditions and that they will demand in no uncertain voice a thorough modernization of our system. We are inclined to think that ignorance about what a central bank would really mean has been more responsible for the popular antagonism to such a system than has the ghost of Andrew Jackson. Good American citizens, who lived two generations nearer than we do to the dissolution of the last Bank of the United States, and were more familiar with its history than are the people of to-day, did not consider it an un-American institution. In this respect Abraham Lincoln's first political speech, which he delivered at New Salem in 1832, may be of interest. He said:

"*Friends and Fellow-Citizens:*

"I am plain Abe Lincoln. I have consented to become a candidate for the legislature. My political principles are like the old woman's dance—short and sweet. I believe in a United States Bank; I believe in a protective tariff; I believe in a system of internal improvements, and I am against human slavery. If on that platform you can give me your suffrages, I shall be much obliged. If not, no harm done, and I remain respectfully yours,

"ABE LINCOLN."

It is seventy-seven years ago that this simple man from the woods, with his never-failing instinct, laid down this remarkable program, of which only one single part, "a United States Bank," remains to be carried out. Let us hope that it will be the pride of our generation to have achieved this step in the onward march of the United States.

PRINCIPLES THAT MUST UNDERLIE MONETARY REFORM IN THE UNITED STATES

PANICS are acute infections of the body economic by the germ distrust. Varying causes may bring about a crisis, which always precedes a panic, but the degeneration of a crisis into a panic is invariably an epidemic of distrust.

Every modern financial system is built on confidence, on credit. Our whole financial structure has become a system of clearings of credit, a system of substituting the token of confidence for the payment in actual cash.

Against the immense amount of demand obligations payable by rights in cash at the option of the payee there is only a comparatively small amount of actual gold. The very moment that a general hesitation sets in to accept this clearing by credit, the very moment that a simultaneous request begins, calling for actual cash in payment of all demand cash obligations, a general collapse becomes inevitable. A modern system must be so constructed that a demand for cash caused by distrust shall be absolutely impossible, or the system is not safe, and the mere knowledge of its being unsafe will precipitate a panic whenever an acute crisis arises.

If a small fire starts in an old-fashioned wooden theater a catastrophe is unavoidable. The mere fact that everybody knows that he is in a fire trap and that the combustion will spread rapidly, brings about a panic with all its horrors of unnecessary loss of life and property. In a modern fireproof building the fire will be quickly extinguished: there will be less food for the flames, there will be a possibility of fighting them, and the feeling of safety will allow everyone to save himself without trampling his neighbor to death or blocking those who also want to escape. It is a critical situation, a crisis, which, thanks to modern construction and wise precaution, does not degenerate into a panic.

Why has our building proved a fire trap and why is Europe's structure safe? Why does Europe's system guarantee the avoidance of panics and why does ours inevitably insure their recurrence from time to time? It is from this point of view that all the material published by the National Monetary Commission ought to be studied and it is from this point of view that the final question of monetary reform must be approached.

Let us then lay down as the first priciple which must guide all our further investigations, that no system which is by universal acknowledgment theoretically defective will ever stand the strain of an acute crisis without that crisis degenerating into a panic. It is of no avail to patch up a theoretically wrong system and to strengthen it by some practical measures which give a false assurance of safety. When the storm comes, fear and doubt will begin to creep in through the loophole which logic, then wide awake, will drill, and once well-founded distrust begins, the system loses its basis, which is confidence, and must collapse. Not every measure that is right in theory is good in practise; but what is wrong in theory can never be right in practise.

Let us lay down then the second fundamental principle, that a financial system which scatters and decentralizes reserves, making them unavailable and insufficient in case of need, is fundamentally wrong and defective.

In a modern system, constructed on credit, cash must be centralized as far as possible into one big reservoir, from which everyone legitimately entitled to it may withdraw it at will and into which it must automatically return whenever it is not actually used.

In order to achieve this there must be two guarantees: one, that the central reservoir is safe and strong enough to supply all the cash that may be required from it, so that nobody will hesitate to let it become practically the sole trustee of all cash; and the second, that every bank depositing its cash or allowing it to stream into the central reservoir will be sure to have the means at its command with which to acquire the cash that it may legitimately have to demand.

In order that cash should always return into the central

reservoir, cash must become less valuable than the interest-bearing right to command cash, which is embodied in a legitimate bill of exchange. To keep large supplies of explosives under our roof is a source of danger; the safer a community the less is the necessity for us to be provided with ammunition. It is the same with large cash holdings.

Individuals, corporations and banks alike in a modern household must try to reduce the holdings of cash to a minimum, because cash holding entails the risk of loss and robbery and because a hundred dollars carried in the pocket for a year, or needlessly hoarded, means a loss of four dollars. Instead of accumulating cash, the desire must prevail to dispose of it as quickly as possible and to turn it into cash credits or interest-bearing quick assets.

This leads to a clear division of the functions of the central reservoir and of the general banks. It is the function and duty of the general banks to act as the custodians of the people's money and deposits and to employ the same in conformity with the principle that a bank must not give any other credit than it receives, which means that against all demand deposits it must be able to provide at all times payment by cash credit. It is the function and duty of the central organ: first, to watch that the right proportion be maintained between all demand cash obligations of the country and the actual cash at its disposal; second, to guarantee that every legitimate cash credit can be transformed at will into actual cash; and third, to establish so firm a confidence in its ability to perform these duties that cash will never be withdrawn to be hoarded, but will always return promptly into the central reservoir, leaving in the hands of the banks and the public only the amounts absorbed by actual circulation or taken for gold exports by creditor nations.

From these different functions of the central banks and the general banks, there follow as a logical consequence the different elements necessarily inherent in their reserves. The central bank, having cash obligations, must have the strongest possible reserve of cash and quick assets payable within a short time. The general banks, having obligations payable only in cash credit, need have reserves only in cash credit and in quick assets, convertible at all times into cash credit.

The channel that connects these two systems and enables them both to perform their functions in safety is the central bank's discount rate. The discount rate enables the general banks to build up a cash credit with the central bank, by rediscounting with it legitimate paper, and to draw actual cash against this cash credit, if necessary. It thus renders the maintenance of a large holding of actual cash unnecessary for the banks. An increase in the discount rate enables the central bank, on the other hand, to protect itself by collecting a larger proportion of its maturing bills discounted, decreasing at the same time the amount of new purchases of paper, and incidentally attracting foreign money or warding off gold exports. While cash payments continue without hesitation, the increased rate brings about a general contraction which will result in a safe ratio between the actual cash holdings of the nation and the grand total of its cash obligations.

The less actual cash is required in the process of paying debts and settling balances, the more developed is the system. This applies not only to the transactions within each city, but much more so to the settlements and payments between cities. Whenever a central bank opens a branch in a city, it means that from that day a bank of that community can deposit with that branch a given sum of money, and request that the amount be transferred to the credit of any other bank having an account with the head office, or any other branch of the central bank. This means that a great clearing system will come into existence all over the country, and that cash remittances for account of the general banks will cease to exist between places where there are central bank branches.

We have repeatedly dealt at length with the folly of a system which makes the commercial paper purchased by a bank immovable assets, locking up the capital of the purchaser, and which forces the banks to consider as their only quick assets cash in their vaults which they must not use, and call loans on the stock exchange which during a panic they cannot turn into cash.

We may then stop here for a moment and establish four general principles, as I would like to term them, which follow from our discussion up to this point:

I. Cash reserves must be centralized into one strong organization where they will be available when needed, and where they will command such confidence that they will not be withdrawn except for actual circulation or gold exports.

II. In order to secure the free return of cash into the central reservoir, there must be some means of exchange between the central reservoir and the banks, so that banks may rely on their ability to build up with the central reservoir a credit balance against which they may draw cash if necessary. This medium of exchange must be commercial paper (under safeguards to be discussed later on).

III. Fluidity of credit must be our final aim. A sound financial system must mobilize its commercial paper and make it a quick asset instead of a lock-up. Mobilized commercial paper, instead of bonds and loans on stock-exchange collateral, must finally become the most important basis of our financial structure. The larger reservoir must regulate the smaller one; not *vice versa,* as with us. Discounts in the main liquidate themselves within a comparatively short period, and by the natural process of consumption. Bonds, which are investments of long maturity, are not self-liquidating, but they and stock-exchange loans, which represent undigested securities, must be finally absorbed by the process of investment of the savings of the nation. This is at best a slow process, in which only comparatively few persons participate subsequently to the initial process of general consumption by all. Therefore no nation enjoying a modern financial system bases it primarily on bonds and stock-exchange loans.

IV. Clearings must not stop within the limits of a single city. Remittances of cash at cross purposes between cities are even more wasteful than within a city, for the loss of interest is so much heavier and the danger of cash withdrawals from one city to another is so much greater in critical times. The central reservoir must act as an inter-city clearing house, as it does in Europe.

Here we have the four main general principles, to which, a little later, we shall have to add two more, concerning note issue. These four principles are so self-evident and so abso-

lutely essential that once we recognize them clearly the work to be done by us in reforming our monetary system ceases to be bewildering and complicated. Our compass is set and the only question that remains is whether we can avoid the cliffs that endanger our course. To effect a centralization of reserves and a safe system of inter-city clearing ought not to frighten us as a problem offering insurmountable difficulties.

To the general principles governing every financial system we now add some principles which ought to be observed with reference to our peculiar conditions. These principles I should like to term the local principles. They are as follows:

1. The central reservoir must not be operated for profit. If it takes the form of a bank, as probably it must, the stock dividends must be limited to what would correspond to a fair investment basis. This moderate return might be guaranteed by the government, which in turn would receive the surplus earnings.

2. The central reservoir would have to be restricted in its operations. It should deal only with banks, bankers, and trust companies. Its main function should be to buy foreign exchange, which it should accumulate in times of ease as a gold reserve, and it should purchase commercial paper from banks and trust companies only.

The difficulty here is that we have as yet no standard discount paper such as exists in England, France and Germany, and that therefore, in order to avoid abuse, some system must be invented which will act as an effective control and which will supply an additional and safe guarantee. How this can be accomplished I have outlined in detail in an article entitled "A United Reserve Bank of the United States," which was published by the Academy for the Merchants' Association of New York some six months ago and which forms a part of the present volume.[1] It would lead too far to go into details concerning the suggestions made in that essay. They are subject to modifications and were published only for the purpose of showing that it is possible without doubt to devise some scheme

[1] *Cf.* p. 75, *supra.*

which, while strict enough to prevent any abuse, can still be made broad enough to allow of practical and effective operation.

3. The management of the central reservoir must be absolutely free from the dangers of control by politics and by private interests, singly or combined. This can be achieved without doubt by a combination of measures like the following: the stockholders would appoint only a minority of the directors; a small number of additional directors would be furnished *ex officio* by some political officers, but the majority could be appointed by groups of banks all over the country under a system, for instance, like that proposed in the above-named plan. These directors should elect and appoint the managing governor of the central organ, who would be chosen and engaged like any other bank president, without any political consideration, but with due regard to ability and character alone.

But safety would have to lie not only in this mode of election, but also and mainly in the limitation of the profits and in the restriction of the operations of the central organ. A stock offering a maximum return of 4% combined with the restriction that the central reservoir may not do anything else but buy certain clearly circumscribed paper under the strictest guarantees and injunctions, cannot possibly involve any danger from monopolistic or political domination.

4. The treasury should cease to deal directly with the banks. The central reservoir should be the recipient of the government's surplus funds and should attend to the government's disbursements. The influence in business of the treasury, a purely political body, must cease.

5. Cash balances with the central reservoir or its branches must be considered and counted by the banks as cash in their own vaults. The central organ must have power to request the banks to keep with it cash balances proportionate to the amount of their deposits.[1] Thus every bank will be made to contribute to the work of the central reservoir, of maintaining

[1] "Banks" always means national banks, state banks and trust companies.

a safe proportion between all cash obligations of the nation and its actual cash, a work which, with the lack of a fully developed discount system, would otherwise remain much less effective. It is fortunate that existing circumstances allow such a measure—which is more far-reaching than similar arrangements in Europe—without adding any new burden to the banks which are in the habit of keeping these large cash reserves. The immense advantage to be gained, without any sacrifice made by the banks, will be that the vast sums of cash accumulated in the central reservoir will be freely forthcoming when needed, and will insure safety, instead of being helplessly and hopelessly stored up by the individual banks.

6. The central organ must be in a position to contract for temporary loans of gold with other governments or foreign central banks, and to receive or give collateral therefor.

This clause is self-explanatory. The power that this measure would confer would go a long way toward allaying fear, and thereby strengthen and benefit the system, even if the privilege were never made use of.

We have thus far left entirely out of consideration the question of note issue. We have done this because the problem loses so much of its complexity and presents itself so much more clearly if the question of notes, which is only a side issue, is temporarily disregarded; and secondly, it is just because we wanted to show how comparatively unimportant this question of note issue really is, that we have endeavored to present the structure in its fundamental lines complete in itself without embodying note issue from the beginning.

To try to remedy the shortcomings of our present system by reorganizing only the note issue, as many reformers have done, is to attempt to repair a broken-down carriage by hitching to it a fresh horse. Effective centralization of reserves and the creation of fluidity of credit are the main questions. Elastic note issue is a side question, though a very important one.[1]

[1] A full argument concerning this point is embodied in the author's article, "A United Reserve Bank of the United States," to which reference is made. The writer apologizes for some unavoidable restatements contained in the present essay.

V. We may now enumerate our fifth general principle, which is this: Inasmuch as note issue, partly secured by gold, is only an auxiliary activity of the central reservoir, the note-issuing power ought to be centralized as far as possible in the central reservoir. For not only does this uncovered note issue give additional safety to the central reservoir, but there is inherent in it a certain regulative power which is lost and endangered by an excessive decentralized and scattered additional note issue. The point is plain: If notes issued by other banks must be paid by them in cash, these other banks would again become accumulators of cash and thus interfere with the free return flow of cash into the central reservoir. This would be a fundamental danger. If, on the other hand, they could rely on the central reservoir to redeem their notes in cash, they could work at cross purposes with the central reservoir, antagonize its restrictive policy, weaken its position, and still throw on it the entire burden of final cash redemption.

Bank notes are deposits on demand in bearer form, passing as cash. If we desire to authorize the issue of bank notes partly secured by bills purchased and only partly secured by gold—as there cannot be any doubt we should—the duty to make sure that this proportion remain within safe limits and that the notes always be met by actual cash must be left to the same organ that guarantees the prompt transformation of every cash token into actual cash.

VI. Furthermore, the function of making money and of issuing money are at times distinctly opposed, and the performance of these functions should lie in entirely separate bodies.

In developing these principles I am not unmindful of the fact that in Europe also there are countries where note issue is not entirely centralized. Changes in a monetary system have to be perfected with extreme care and patience, and everywhere it has been necessary to live through periods of compromise before finally reaching the coveted goal. In Germany, where there were thirty-two banks of issue, there are now only five, including the Reichsbank, which now, as a matter of fact, has become the all-important regulator. The other banks have been brought into a state of coördination

where they have to coöperate in following the Reichsbank's lead.

We, too, shall have to be prepared for a period of compromise concerning note issue. We have before us a complex problem, inasmuch as there are at present in circulation too many inelastic and unsecured, or poorly-secured notes, like the national bank notes, the greenbacks, and the silver notes. To convert at once any and all of them into the notes of the central organ would be too large an undertaking at this time. However, we may safely leave in circulation about half the amount now outstanding, to serve as the pocket money of the people, and begin by substituting the new elastic notes of the central organ for the other half. For elasticity means not only expansion, but also contraction. We must instil into our present system a sufficient amount of elastic notes—elastic because, being issued against bills purchased, they are withdrawn from circulation when the money paid for this paper at maturity is not reinvested in the purchase of other bills. If the bank cannot contract its notes in time of ease, it cannot expand as far as it should in times of stress. The principle ought therefore to be established that an ample portion of our present unsecured notes ought to be withdrawn and replaced by the notes of the central organ.

This, again, is not an impossible task. We have outlined in our previous plan how it could be accomplished by withdrawing the national bank notes and leaving the greenbacks and silver notes in circulation.

We could well imagine another plan,[1] which is advocated also by Prof. Sprague of Harvard, in connection with suggestions now made by him for a modified form of a central bank. This plan would probably be more popular, though in my opinion not quite so sound. It is a scheme which would for the time being leave the national bank notes and silver certificates undisturbed and provide for the redemption of the greenbacks. The government would deposit with the central organ the $150,000,000 gold held against the 356 millions of

[1] *Quarterly Journal of Economics*, Feb., Aug. and Nov., 1910.

greenbacks now outstanding. The central organ would assume these greenbacks and we should suggest that it receive in turn the privilege of calling on the government in times of stress to pay for the remaining 200 millions, which the government would have the privilege of doing either by issuing to the central organ some short treasury bonds or by paying in cash. This would enable the bank in case of extreme demands to place the treasury bonds at home or abroad and break the pressure on its gold holdings. The surplus earnings of the central organ should be applied under this plan as a gradual redemption fund of the outstanding government bonds held by the national banks, and if, later on, it should be found necessary, the redemption of the government bonds in the hands of the banks might be accelerated by other means.

7. No matter what may happen, not one additional government bond must be issued, carrying with it the privilege of further note issue by the national banks. While the national banks, which acquired these bonds in the past, are entitled to full and fair protection as to their present holdings, this reckless inflation of our currency system, which even to-day is a serious obstacle to monetary reform, must not be allowed to increase and thereby further weaken our miserable system.

8. Automatic taxes governing scattered note issue cannot bring about a safe and practical regulation. Conditions vary; a drain from within has to be met in a different way from a drain coming from without. Demands originating in healthy periodical economic developments must be treated in a different way from demands caused by over-expansion and over-speculation. In a large country covering the most varying geographical, social, and economic conditions, one ironclad tax, applied without possible discrimination to all alike at the same time, will do harm in one corner while it does good in another.

The system must provide for the use of brains and for a wise power of discrimination, though the regulative power must be so strictly circumscribed that there can be no other motive but the general good in deciding upon the questions as they arise. The elimination of any possibility of gain, the restriction of

the functions of the central organ and the composition of its board will guarantee this.

One word in closing. With a structure as defective as ours, we cannot expect to develop at once an absolutely perfect new system. Monetary reform must try to perfect changes without violently upsetting existing conditions. The principles laid down here, and the details contained in my previous plan fully allow for this. The changes proposed leave the business of the banks and even their methods almost untouched. In order to do this, the so-called local principles must adapt themselves to conditions. However, there must not be the slightest compromise in two respects: The changes must err rather on the side of safety than on the side of immediate perfection and the fullest efficiency; and furthermore, they must contain nothing that is in contravention of those general principles which can be neglected only by endangering the whole structure.

Centralization of reserves, effective concentration of note issue, and fluidity of credit, strongly safeguarded, though thereby somewhat clumsy in the beginning, are the rules that must and can be observed. They are the only means of safely killing the germ distrust, or, to change the metaphor, of averting the ignominious struggle for life in a fire-trap. Unless we follow these lines we shall again see the sorry day when banks will trample each other to death in the mad attempt at saving themselves, till general suspension will put an end to this disgraceful scramble, marking in turn only the beginning of untold misery for the nation.

Slowly but surely it is becoming evident to the nation—and if the work of the Monetary Commission had accomplished nothing more, it would have done a great deal—that central banks are not oligarchic but democratic institutions, that central banks by creating safe conditions render the small banks independent of the dominion of the large institutions, and that in Europe the central banks are the backbone of the independent banks in their fight against the ever-growing branch-banking system.

A system of centralized reserves and decentralized banking

power is clearly the one that this country requires, and it is my conviction that it will gladly accept it when once that system is clearly presented to it in definite form.

I have here avoided the name central bank, and have used the name central reservoir, just as in my previous articles I have termed the institution a central reserve bank or a united reserve bank. This has not been done from cowardice, for the purpose of avoiding a name against which popular prejudice ran high. It has been done for the reason that, first of all, the name expresses what is to me the most important feature of the problem, namely, the centralization of reserves. The second reason is that we should not have, and what we suggest is not, a central bank. Wherever central banks exist, their powers are infinitely wider; they are real banks privileged to do almost a complete general banking business. The central organ, on the other hand, as here suggested, though securing to us the principal advantages of the central bank system, is nothing but a central reservoir, precluded from doing a general banking business and invested only with such functions as it absolutely needs for its own protection and for the protection of the nation.

It has been a great privilege to be allowed to read this paper under the auspices of this academy and the commercial bodies uniting with it in this national conference and under the eyes of the members of the Monetary Commission. We wish the latter godspeed. May success be with them and may they take up this momentous work without any further delay.

These years have been well employed in locating the evil and in clearly diagnosing the case. But now is the time to perform the operation, before the patient gets another relapse. Let us hope that this question, which is non-partisan—for as far as we remember we did not find that Republican faces looked any different from Democratic ones during the panic—will be solved on non-partisan lines and that new nationalism will bury the hatchet before the vastly more important question of new national-bankism.

THE DISCOUNT SYSTEM IN EUROPE

IF banks were to keep, in cash, all the money deposited with them, business would come to a standstill and a crisis would ensue. If banks were to lend to those who apply for loans all the money on deposit with them, a general panic and collapse would follow a short period of overstimulation. Between these two extremes lies the middle course, the finding of which is the problem, and its practise the art of banking.

No mathematical rule can state the correct proportion between reserves and demand obligations. The proper solution of this question depends in each country on its varying political and economic conditions and on its financial system. This general principle, however, may be safely laid down: with the present system of immense deposits payable on demand, and, by right, payable in gold, at the option of the payee, only that structure is safe and efficient which provides for effective concentration of cash reserves and their freest use in case of need, and enables the banks, when necessary, to turn into cash a maximum of their assets with a minimum of disturbance to general conditions. In this respect recent events have made it clear that our system is an unqualified failure. It is now generally acknowledged, even by those who were formerly most unwilling to concede it, that the end of 1907 witnessed one of the most impressive victories of the central bank system. More specifically, it was a victory of the "discount system" over the system of cash advances, because the central bank is only a component part, though a most vital one, of the discount system. A close analysis of the discount system, on which Europe's entire financial structure rests, may therefore be timely and interesting.

I

What is the essence and the object of "discounts"?

The original transaction from which discounts finally develop is an advance; it is either an advance in cash, or an advance in kind, *i. e.*, the postponed payment for goods received. As evidence of this advance, and as an instrument on which to sue in case of default, the promissory note was created. So long as this note retains this primitive form and function it is of comparatively little value to the financial system of a nation. It represents nothing but a handy way of expressing an individual contract between two parties, embodying the acknowledgment of having received a temporary advance and the promise to pay it back.

Similarly, primitive part ownership in a business meant an individual contract, entailing a definite locking up of cash, inasmuch as such a contract could not be sold except after prolonged negotiation and search for a new partner. But gradual evolution led to the creation of the corporation, and the unsalable part ownership was transformed into bonds or stocks, for which important and well-regulated markets insured a ready sale.

A modern financial household is inconceivable without the adoption of such system of mobilizing permanent investments of this character. We are so accustomed to this phase of economic development that we find it difficult to conceive how comparatively recent an achievement this device is Only a few, however, realize that we have stopped halfway. Although we in America have mobilized our permanent investments, our promissory notes, or temporary investments, still retain their primitive form, while Europe has not only mobilized its permanent investments, but has in addition mobilized its temporary investments by changing the promissory note, or "bill," into a "bill of exchange" and by creating large discount markets where these "bills" can be "exchanged" freely at any time.

"Discounts" represent — or, like our promissory notes, ought always to represent—temporary indebtedness which is

to be paid off by the liquidation of the business transaction for the carrying out of which the loan was incurred. A bill may be drawn for cotton while it is being harvested, or while it is in transit for Europe, or while it is being manufactured into yarn, or while the merchant that purchased the finished article continues to owe the manufacturer therefor, or possibly even while the finished article is being shipped back to the same country from which the raw product originally came. To bridge each of these periods a long bill might properly be drawn by the various parties who, each in turn, handle the goods on their way from their original state to their place of final distribution. The length of the bill will depend on the underlying transaction; in England, France and Germany it varies, as a rule, between two and four months, the vast majority of such paper being issued for three months.

With us the promissory note is, generally, one-name paper, while in Europe single-name paper is looked upon with distrust and is scarcely purchased at all by the banks. The European banker believes in having several signatures on the bill that he buys, thus securing more than one guaranty. Furthermore, additional signatures are evidence of the legitimate character of the paper and show that the money was taken for a temporary transaction, not for permanent investment. However, there are certain stages during the process of manufacture when the producer is not yet able to sell the bill on his prospective customer; or there may be good reasons why a business man will prefer not to divulge the name of his customers. For such and similar cases the European banks or bankers either allow overdrafts (cash advances) or else they permit the customer to draw on them a sixty- or ninety-day bill (whichever may fit the case) which, when accepted by the banks or bankers drawn upon, the customer can then sell at the ruling discount rate wherever and whenever he desires to do so.

Through the acceptance or indorsement of the merchant's note by the bank or banker the promissory note—from being a dead instrument and a nonliquid asset—becomes a liquid asset, part and parcel of the system of tokens of exchange which serve as a substitute for money or as auxiliary currency.

The old promissory note is nothing but the evidence of a commercial credit, the granting of which entails a material business risk and must remain an individual transaction to be concluded only by the few who happen to be well acquainted with the issuer of the note and are willing to take the hazard of granting that particular credit. Through the addition of the banker's signature the question of the maker's credit is eliminated and the note, instead of being a mere evidence of an advance, is transformed into a standard investment, the purchase and sale of which will be governed only by the question of interest. This investment commands the broadest possible market.

Acceptances are given by European banks and bankers mainly for three kinds of drafts: the documentary bill, the commercial credit bill, and the finance bill.

The documentary bill is probably the most important of these three. If an American merchant buys coffee in San Paolo, he will generally pay for it by opening for the shipper a documentary credit in Europe; that is to say, the American purchaser makes an arrangement with the European banker, by which the latter agrees to accept, let us say, a three-months' bill drawn on him with shipping documents attached, covering a certain shipment of coffee, the amount to be drawn being the equivalent of the amount due by the American purchaser to the South American shipper. The shipper will have no difficulty in selling to a bank in San Paolo his bill drawn on a first-class European banking house, and thus will promptly secure the money due him for the goods sold. The local bank in San Paolo will buy the bill without hesitation (if the shipper is not of the very best standing, the bank will demand that the letter of credit against which the bill is drawn be produced) because it knows that it need only send this foreign bill to England, Germany, or France, as the case may be, where, owing to the extensive discount market in these countries, it can immediately rediscount the bill, thus securing repayment in cash for the amount invested. Indeed, if the Brazilian bank prefers to do so, it can at the moment of shipment, by cabling to Europe, fix the discount rate at which the bills will be discounted upon their arrival in Europe.

When the bill reaches Europe, the drawee puts his acceptance on it, and having thus obligated himself to pay the bill when due, the documents are in most cases released and sent to the American purchaser of the goods, who opened the credit with the European bank. Of course, the American purchaser pays a commission to the European banker for the service rendered. The compensation depends on the standing of the purchaser and in part on the question of whether or not the documents are to be released upon acceptance (the American purchaser obligating himself to put the bank in funds before the bill falls due), or whether or not the documents are to be given up by the accepting bank only against cash payment by the purchaser. It may be said that the average compensation for such acceptance credit is between ¼ of 1% and ¾ of 1% for three months, according to the conditions of the case. The majority of all shipments of merchandise, particularly those of raw material, are everywhere "financed" in this way by documentary bills on Europe. It is interesting to note right here that no matter how good may be the credit of the American purchaser or of any American bank, whose acceptance the purchaser may offer to the shipper in China, South America, or Europe, no shipper in such countries will, as a general rule, take the acceptance of an American bank or banker, because the American bill has no ready market, while the European bill is of very easy sale. It is impossible to estimate how large a sum America pays every year to Europe by way of commissions for accepting such documentary bills, and the other bills with which we shall now deal, but the figures run into many millions. This annual tribute to Europe resulting from our primitive financial system is not merely waste of money, but reflects upon the dignity of a nation of the political and economic importance of the United States.

Next in importance to the documentary bill is the two- or three-months' bill drawn on a bank or banker as a commercial credit granted by the acceptor to the customer. This transaction is a comparatively simple one. It means that the European banker permits his customer, whether residing in

the banker's own country or abroad, to draw on him at two or three months' sight, with the understanding that the customer will put the accepting banker in funds before the bill falls due, so that the drawee will not be called upon to advance any cash. He merely gives his signature to an acceptance, which the customer sells under discount, employing in his business the cash thus realized. The privilege of renewing the bill at maturity is often agreed upon at the outset, and the use to which the customer may safely and legitimately put the money realized from such a credit will in part depend on this feature of the arrangement between banker and customer.

Large business firms will, as a rule, have such accommodation at their disposal in several countries and they will draw against their credits on such countries as have the lowest discount rate for the time being. They may use all foreign credits at the same time when the interest rate at home is higher than the rates ruling abroad, and, conversely, they may at times cover all their foreign credits and use only the financial accommodation offered at home if for the time being the home rate is lower than the rates abroad.

The vast majority of these commercial credit bills are drawn without collateral, but there are many instances where the drawer of the bill gives security to the acceptor by the pledge of his own bills receivable or of claims against his customers or of merchandise or similar collateral.

The total volume of bills representing commercial credits given by one country to any other is relatively unimportant as compared to the amount of documentary bills issued, but large numbers of such bills are drawn by the home customer on the home banker, especially in France and Germany.

In England, banks and bankers generally avoid accepting long bills for home customers, whom they prefer to accommodate by cash advances, but they accept very largely for out-of-town customers. The joint stock banks in England make it a rule to accept only against collateral, while important private banking firms and banks, which often make accepting their exclusive business, grant uncovered credits to a very large extent. In France and Germany no line of demarca-

tion of this kind exists; banks, large and small, and private bankers as well, accept with or without collateral, according to their own best judgment. The aggregate amount that a firm in any of these countries will accept must, of course, bear a certain relation to its own resources. But this proportion differs according to the character of the general business done by such firm. A bank doing an extensive general banking business will accept to the extent of a part of its capital only, while banks or bankers devoting themselves exclusively to the business of accepting will accept an aggregate amount representing many times their own capital.

Since the rate for a three-months' cash advance is very much higher than the discount rate for three-months' bills, it is nearly always more advantageous for the customer to draw on the banker and to pay the commission for acceptance and, in addition, the European stamp tax, rather than to pay the rate of interest charged for a three-months' cash advance.

This heavy difference between the discount rate and the rate for cash advances most eloquently illustrates the different valuation applied by the European banker to an investment of easy sale—the discount—as compared to one that locks up cash for even the comparatively short time of three months in a nonliquid asset.

Finally we must mention the so-called finance bill.

Some finance bills are drawn and accepted within the same country, while some are issued in one country and drawn on another. The first class is drawn by home brokers on banks or bankers against stock-exchange collateral, which, for the time being, it is cheaper to carry by an acceptance credit than by a cash advance. But there is generally some discrimination against finance bills, as the idea prevails in the banking community that discounts ought to be based on temporary commercial or industrial transactions and not on undigested securities. The central banks in general absolutely refuse to buy such finance paper, and, as the prejudice against local finance paper is even stronger than that against foreign-born finance paper, the amount of such paper issued within the boundaries of each nation is comparatively small.

The foreign finance bill is drawn by a bank or banking firm in one country on a bank or banking firm in the other country, either with or without collateral. It is drawn in order to profit by the difference between the interest rate in the country where the bill is issued and the discount rate in the country on which the bill is drawn. A great many of these bills are drawn on France, where the interest rate is generally lowest, and on England, which, as a rule, has indeed a somewhat higher rate of interest than France, but which, on the other hand, is a more liberal acceptor, and finally on Germany. At certain periods the largest amount of such bills probably originates in the United States, being drawn chiefly on independent European banks or bankers against stock-exchange collateral. Very substantial sums, however, are drawn without collateral by American firms on their own branches in Europe. These so-called "house bills," which were very popular in the past, have during recent years met with a good deal of antagonism on the part of the European discounters, and in consequence are not used so freely as they were in years gone by.

The most regular customer in drawing finance bills is Russia, whose bankers, owing to the comparatively high rate of interest generally ruling in that country, almost constantly use whatever acceptance credits foreign bankers are willing to place at their disposal, the collateral generally being Russian commercial paper.

II

There are, then, two primary kinds of bills in use in Europe —the one drawn by the producer, manufacturer, or trader on his respective purchaser and accepted by the latter, and the other the bill drawn on and accepted by a bank or a banker.

Let us now consider how these bills are discounted in Europe. While methods differ in the various European countries, the result in all cases is the same, and, as we are chiefly interested in results, it will be preferable not to cloud the question by going into too much detail respecting the various usages, but rather to state the main principles.

Stated very generally, and fully bearing in mind that there are exceptions to the rule, it may be said that the bulk of the bills drawn on mercantile firms go to the banks or bankers direct from their customers, and it may also be said that these bills do not circulate very freely in the open market, while the bills accepted by banks and bankers are freely sold and circulate freely in the open market.

There are three kinds of purchasers of discounts in all important financial centers. One is the central bank of each country; the second is the banking community at large, which means banks, bankers, and brokers, who form the regular investors; the third is the irregular investor within and without the country.

The relationship between the central bank and the discount market is a most important one. While in normal times only a small proportion of the business is done by the central bank, the existence of this bank is all-important to the whole financial structure, because even if a bank makes it a rule not to rediscount with the central bank and in its general business keeps independent of this institution, the fact remains that in case of need it can nevertheless rediscount with the central bank every legitimate bill, both bankers' or mercantile acceptance, so that every legitimate bill represents a quick asset, on the realization of which every bank or banker can always rely. Consequently no investor, bank, banker, private capitalist, or financial institution will ever hesitate to buy good bills. Furthermore, there will not be in critical times any rush to sell good bills, as everybody in these countries knows that there is no better and safer investment, because for no other investment is there an equally reliable market. It is this confident reliance that creates the enormous discount market in modern financial economies and that renders it possible for untold millions of discounts to change hands daily, sometimes without any change whatever of rate or else with fluctuations of only $^1/_{16}$ or $\frac{1}{8}$ of 1% per annum. The literal meaning of "credit" is confidence. Our whole structure is based on credit, or confidence, and not on cash. Unless this confidence is absolute—and it can not be absolute under an admittedly defective system—the whole edifice is unsafe.

Another factor which helps to strengthen this confidence and to render the system perfect is the existence of strict and uniform laws concerning the issuance, the indorsement, and the collection of such paper, and particularly regulating the right to "protest" and promptly to sue the maker, the indorser, and the acceptor.

Finally, it is necessary for the development of a vast discount market that there be established a system of the freest exchange of money all over the country, rendering possible an easy collection of bills everywhere.

The central bank system of the various countries has been fully dealt with in separate articles, and we may therefore confine ourselves to stating only the general outlines of this system as far as it relates to the discount market.

It is one of the main duties and privileges of the government banks to buy legitimate paper, with bankers' acceptances or bankers' indorsements. As the government banks from time to time buy this paper, the volume of their circulating notes, which they issue in payment, increases, while, on the other hand, when they collect this paper at its maturity and thus reduce their holdings of discounts their outstanding circulation decreases. This means that they expand or contract according to the requirements of trade, because discounts represent progressive stages in the process of commerce and industry. However, this is not a merely automatic process, for when those entrusted with the management of the central bank see the necessity of exercising a restraining influence on the business community, they raise the rate at which the bank will discount, and in this they are generally followed by the other banks of the country. The government bank's discount rate, which is uniform for everybody, is, as a rule, so much higher than that of the general banks, and the restrictions as to the character of the paper which the government bank can take directly are so much more rigid than the requirements of the commercial banks, that in normal times the bulk of the business is done by the general banks and bankers. Only when the demand for money increases, does the rate of the general banks begin to approach that of the government bank,

but when this happens the government bank, as a rule, raises its rate, so as to maintain its margin over that of the general banks.[1]

The government banks consider themselves more or less as custodians of the national reserve, ready to take an active part in the nation's business only in times of emergency. The distinction should, however, be carefully observed between the abnormal crisis and what we may call the normal emergency, arising periodically in consequence of certain economic changes, like crop movements or the particular requirements for special industries at fixed periods, which, as experience shows, subside as regularly as they occur. When these normal emergencies arise, the central banks do not ordinarily raise their rate, but, for a time, meet all the requirements at the usual, or at a very slightly increased, rate and allow their circulation to increase with the result that the reserves go down. When the government banks anticipate, however, that more than a normal emergency will have to be dealt with, they successively raise the rate in order to protect the reserve and to force liquidation, and in order to deter all branches of industry from entering upon far-reaching obligations.

Each government bank has a very decided interest in keeping its gold holdings as large as possible and in preventing the gold from leaving the country. If an augmented demand for money and credit accommodation increases the amount of notes outstanding, the government bank, by raising its rate, purposes not only to encourage a general contraction of business and to force the general banks of the country to contract, but also to attract foreign money into the country by the inducement of the higher interest return.

Most of the central banks in normal times accumulate large amounts of foreign bank paper. This is done for a two-fold purpose: First, in order to withdraw funds from the home market at a time of ease, thus creating a reserve; second, for the purpose of warding off withdrawals of gold by use of the

[1] Some of the government banks at times establish a private discount rate, lower than the official bank rate. We shall, however, not enlarge upon this point in order not to complicate the question unduly.

foreign bills when foreign exchange rates approach the gold exporting point.

The relationship of the central bank and of the general banks to the discount market differs somewhat in the various countries. In France and Germany, where the big banks have taken up, more or less, all branches of the banking business, the intercourse between customer and bank on the one hand, and bank and central bank on the other, is a pretty direct one. While a large business is still done by brokers and consequently in the open market, a majority of the transactions is carried on directly between customer and bank and bank and central bank.

In England the various branches of business have, so far, been kept more strictly separated. The investment business in England is largely done through brokers. There are large check banks doing exclusively a deposit account business; there are certain firms devoting themselves almost exclusively to the flotation of loans, either international or domestic; certain other firms doing exclusively a business of acceptance (for documentary or covered or uncovered credits, as explained above); still other firms doing almost exclusively foreign exchange business, while certain large companies and private firms devote themselves entirely to the discount business; and finally there are the bill brokers, doing an intermediary business between the customer, the banks, and the discount companies.

The enormous amount of bills held by the discount companies and bill brokers in England is to a very large extent carried by them through loans on call from the banks. The banks regulate the average plus and minus of daily demands over daily maturities, to a large degree, by calling or increasing these call loans or else by buying or selling discounts. If, on balance, money is called from the discount companies or bill brokers, short bills will go to the Bank of England. In France and Germany, where the big banks have less hesitation in rediscounting freely with the central bank, the organization of discount companies and bill brokers is eliminated, and in order to settle the daily balances short bills are sent to the central bank directly by them.

It may safely be said that in normal times the big banks in Europe do not rediscount their long paper with the central bank. For in such times maturing paper and money on call take care of the daily demands made upon them, and if the demand reaches larger dimensions they send their short maturities for discount and collection to the central bank. It is a sign of somewhat abnormal conditions and a signal for banks and central banks to exercise caution, if the bills discounted by the general banks with the central bank gradually change from short maturities to bills having a long time to run. It is of interest to know that the average life of all bills taken by the German Reichsbank in 1907 was thirty-two days, and of those taken by the Banque de France twenty-six days. The Reichsbank's investment in discounts was 13.8% of the total of all discounts in circulation in Germany during that period; the Banque de France held 12.5% of the total French circulation of discounts. Similar statistics concerning the holdings of the Bank of England are not available.[1]

Not only do banks and bankers invest in discounts, but financial institutions, industrial corporations, private firms, and individuals do likewise. Instead of keeping all their idle money on deposit, they invest a certain proportion in paper drawn on banks and indorsed by banks or discount companies, thereby giving stability to the whole financial structure. This is in striking contrast with conditions as they exist in this country, where unemployed money is to far too large a degree deposited with banks and trust companies, with the result that this idle money, which must earn interest, is finally piled up in the large money centers, especially in New York, and is there lent out on the stock exchange in the shape of call loans, forming an element of danger for the whole structure.

Moreover, the discount system plays a most important rôle as an equalizer between nations. Money flows where it can earn the best return, provided it can there be invested with

[1] On December 31, 1908, the Reichsbank held in German bills 1,032,000,000 marks; of these 44% were payable within fifteen days, 17.4% within sixteen to thirty days, 24.8% within thirty-one to sixty days and 13.9% within sixty-one to ninety days.

safety and with a confident expectation that the investment can easily be resold and the proceeds of the sale easily collected.

If England has a private discount rate of, let us say, 4%, and if, at the same time, there is in France a discount rate of 2%, it stands to reason that the big French banks and the French public will invest in English bills, and that French money will go to England. The same holds good, of course, as to German, Austrian, Russian, or Scandinavian bills. The French banks would not buy the individual note of an English, German, Austrian, Russian, or Scandinavian merchant whom they do not know, but they do know and can value the acceptance or the indorsement of the foreign banks that offer and indorse or accept this paper. They would, however, not buy this paper, unless they knew that it could be rediscounted at any time in the home country.

Between the indebtedness of one nation to another and the actual settlement of that debt in gold, there lies, as a buffer, the borrowing power of the banking communities of the respective countries. This buffer with us has proved lamentably weak, because of our lack of a discount system. Because of this lack our bills are practically unsalable. It is not customary with us for a bank or a banker to indorse and to offer for sale the promissory note which he has purchased, nor is it customary for our banks and bankers to accept bills drawn on them, and so the United States has no American paper to offer which Europe could buy. Therefore when the necessity develops of temporarily attracting foreign money into the United States, there is nothing to fill the gap except our securities at bankruptcy prices and our "finance bills" drawn by our banks and bankers.

That is to say, the American banker, instead of adding his own credit to that of the American merchant or manufacturer and thus using the merchant's signature to legitimize his own demand for accomodation, locks up the unfortunate promissory note and secures for himself an entirely new credit on his own resources, quite independent of the original transaction, instead of simply infusing life into this dead note.

But our bankers' bills inevitably bear a financial character, and therefore will not be regarded so favorably as would be commercial paper; moreover, since the drawers and, to an even greater extent, the European acceptors are comparatively few, European bankers must at times limit their purchases for fear that they are getting too large an amount of paper drawn, accepted, and indorsed by the same firms.

Moreover, as these bills, drawn, as the case may be, in pounds sterling, francs, or marks, normally sell at the same rate of private discount as all the other long bills in the country, the European finds no particular inducement to purchase them. When, therefore, there is an excessive amount of these American bills offered, the consequence is discrimination and, what is worse, a feeling of uneasiness and distrust.

If, instead of this unfortunate method of financing, we could offer American paper drawn in dollars, showing its commercial origin, and indorsed by American banks or banking firms, we could vastly multiply the avenues leading into the vaults of the European banks, and our bills would be well distributed instead of going into a few channels which can so easily be closed, and which, as the past has shown, were very energetically and disastrously closed just at the time of our greatest need.[1]

What an anomalous and inefficient system which, instead of using the credit of the whole nation—producer's, manufacturer's, and merchant's credit joined to that of the financial institutions—demands that a few banks and banking firms

[1] Our own system being absolutely inelastic, we have become accustomed to use as a substitute the power of our banking community to borrow in Europe. We thus use Europe as an auxiliary financial machine; but we forget that our weight has become so great as to threaten the safety of the European machinery when we are compelled to use it to its utmost capacity in order to provide for our needs. Europe, in sheer self-defense, refuses under those circumstances to let us borrow, and by the simple means of refusing our finance bills renders useless our reserve of elasticity. Thus, instead of securing additional means of assistance at the most critical moment, we find ourselves suddenly forced to dispense with a most important part of our machinery, upon which we were wont to rely in normal times. This is what happened during the panic of 1907, and history will repeat itself, unless we adapt our system to our growth.

should furnish single-handed the accommodation for a nation of ninety millions of people!

III

We shall now consider the discount system in its position as the basis of the whole financial structure, and contrast this system with our own.

The European financial system is constructed upon discounts as its foundation; the American system is constructed upon bonds and stocks as its foundation. Bank notes in Europe are issued mainly against bullion and discounts; in the United States mainly against bullion and bonds.

The quick assets held by European banks against their deposits consist of discounts or call loans, largely secured by discounts. The quick assets of American banks—promissory notes being unsalable and cash reserves being unavailable—are primarily call loans on stock and bond collateral.

In Europe the daily plus and minus of money requirements are adjusted by the use of the discount market—that is to say, in a final analysis, by purchase or sale of bills. (Calling in or putting out money on call where the loans are secured by bills amounts, in effect, to a sale or a purchase of bills.) In a last analysis this means that in Europe attempts to liquidate are primarily appeals to the whole nation to liquidate its temporary commercial investments, the brunt of such liquidation being borne by the entire community, and the pressure being constantly subdivided, every member of the community thus contributing his share.

As a majority of discounts represent goods in process of production or on the way to consumption, liquidation with them expresses itself primarily by a falling off in new production, while the consumer, on the other hand, can not stop consuming and must therefore continue to pay. The brunt is thus borne by the whole nation and adjustment follows without violent convulsions.

In sharp contrast with such a system the attempts to liquidate in the United States are directed primarily at the contractors of stock-exchange loans. This means that a comparatively

limited number of debtors are called upon to sell their securities. This they can do only by finding new investors, who, as a rule, are at such times comparatively rare, because when acute pressure arises it generally originates in the inability of the investor to purchase because of lack of funds or in his unwillingness by reason of his distrust of the financial situation. The concomitant of this is that those forced to sell securities at such times must offer them at sufficiently reduced prices to bring about an entire change in the attitude of the investor. The difficulty here is that violent reductions of prices in themselves cause distrust, and low prices caused by distrust not only frighten away purchasers but, in addition, unsettle the owners of securities and thus cause them to join the ranks of the sellers. An acute convulsion, therefore, must inevitably follow before the tide can be turned.

In order to bring about relief from strained financial conditions the depositor must be transformed into the investor and foreign money must be attracted into the country. To accomplish either the discount system is the most efficient.

The insurance premium for each transaction is commensurate with the risk of the same. It is for this reason that an even moderately attractive interest rate for discounts in modern countries will attract the foreign capitalist and the home depositor, as both know that an investment in discounts can be realized on at any moment without material sacrifice, and this is at the same time the explanation of the fact that, with our defective and explosive financial system, we must offer tremendous interest rates or our securities at bankruptcy prices in order to attract foreign money or turn the home depositor into an investor in critical times. Everybody knows that under our system convulsions must follow acute strains and must precede a cure, and therefore the average investor waits for the *débacle* before purchasing. And this attitude in itself accentuates the range of fluctuations, which, under the European system, is far less wide.

Of course, general liquidation in Europe includes a liquidation of securities, just as liquidation in the United States also includes liquidation of commercial paper as it matures. But

the difference is that in Europe bills will be the main factor and securities will play a much more subordinate part, while with us just the reverse is true.

A few words ought to be said here about the diastrous effect of our obsolete usury laws.

There does not exist any law fixing the maximum rate of discount in any of the important European states. During the development of the central bank system attempts have at times been made to keep money rates low by compelling the central bank not to charge more at any time than a given rate. History shows, however, that such attempts have invariably ended in failure, and the fact is now generally accepted that the fixing of a maximum rate kills the efficiency of a modern financial system. Such a system requires elasticity and the theoretical possibility of adapting itself unreservedly to all conditions that may arise. The mere fact that the system provides for such means of free defense so strengthens the whole structure that where no such restrictions exist exorbitant rates are, as a matter of fact, the exception; while in a country like ours, where such restrictions prevail, abnormal conditions become a regular occurrence.

High call rates do not tempt either home or foreign investors, the latter particularly being barred from freely profiting by a high call rate by the fact that rates of exchange for remittances from one country to the other vary constantly, so that, unless the margin of interest can be secured for a fairly long time, at least a month, the profit in interest is not large enough to compensate for the risk of a possible loss in the rate of exchange.

It is obvious that, when European discount rates are higher than 6%, we must be able legally to make time loans at rates exceeding 6%, if we are to protect ourselves. Discount is time money on call, and in a modern community time money —not the call rate—is the decisive factor in the constant flow of money from one country to the other.

Our usury law prevents the free development of rates for time money and incidentally prohibits the establishment of as wide a time-money market as exists in Europe. Since legally

and officially our time-money rates can not exceed 6%, the call rate, which is a fairly unimportant factor in Europe, must become the deciding factor with us. It is a most extraordinary (almost an amusing) fact that these call rates, fluctuating from a fraction of 1% up to the confiscatory rate of 100% and sometimes even more per day, and bringing ruin to the weak, should be the direct consequence of a law aimed at protecting the very people whom it destroys.

Usury laws in Europe, where they exist at all, apply only where the borrower is in dire distress when seeking and accepting a loan, and where the lender knowingly profits by the borrower's helpless situation when exacting usurious rates. Usury can be judged only in the light of the surrounding circumstances; and usury laws in Europe generally apply only to individuals. Our law, which prevents solvent firms of bankers, merchants, manufacturers, or brokers from contracting for money on time at more than 6%, implies not only undignified tutelage, but unsound business judgment. The recent crisis has shown that charging people in need more than 6% is not necessarily taking advantage of them. On the contrary, it would have been a blessing to them, and in many cases their salvation, had they been able to borrow money even at a much higher rate. This unsound and completely indefensible usury law is, however, the reason why we must have daily settlements on the stock exchange, and why our system must in this respect also be strictly opposed to the systems of Europe.

In England, France, and Germany there exist monthly or half-monthly settlements of stock-exchange transactions, and as stock-exchange loans run from one settlement to the next, the amount of money employed on the stock exchange between settlements remains stationary. If, at the settlement, it develops that commitments on the stock exchange have increased and that a larger amount of money is needed there, so much additional money will under normal circumstances be withdrawn from the bill market and go into the stock exchange. If less money is wanted on the stock exchange, so much more will go into the bill market.

Without entering upon a discussion of the question of cash stock-exchange dealings versus stock-exchange dealings per settlement (for which, be it said in passing, a suitable method of weekly stock-exchange settlements can probably be devised for this country, combined with provisions for proper margining in order to prevent over stimulation or gambling), we are, for the purposes of this article, interested only in the effect of this method of cash dealings on the whole financial system. An exclusive system of cash dealings brings about the preponderance of the call loan on stock-exchange collateral. But for the existence of the seducing call loan, which is one of the gravest dangers and curses of our system, we should have been forced to develop our bill market as a regulator of our daily money requirements. In that case, instead of seeing the idle money of the whole nation poured into stock-exchange loans when trade is inactive—thus unduly stimulating speculation when it should be discouraged—and again withdrawing money from the stock exchanges in order to provide for the business of the whole nation when trade becomes active—thus bringing about anxiety and convulsions on the stock exchange in the face of prosperity—we should have a system based on bills; that is to say, based on the broad foundations consisting of the commerce and trade of the whole nation, and we should then enjoy an almost uniform rate of interest all over the country, gently rising and falling within moderate bounds, instead of the violent fluctuations and unbearable conditions to which we are now subjected.

The aggregate amount invested by a nation in trade and commerce should be and is many times the amount invested in stock-exchange loans, which latter represent undigested securities and securities carried for speculative investors. Our way of doing business may be illustrated by two adjoining reservoirs, one small and one very large. The small one represents the stock exchange and contains the call loans; the large one represents the general business of the country, as expresed by commerce and industry. In Europe the small reservoir is regulated by pumping water into it from the large one or by withdrawing water from it into the large one. In

this way the outflow and inflow of the large reservoir are scarcely perceptible, and yet there is no difficulty in regulating the small one. With us, the reverse is done. If there is a shortage of water in the large reservoir we draw on the small one and, in order to increase the water in the large reservoir by perhaps an inch, we empty the small one altogether, or else in order to decrease the amount of water in the large reservoir by an inch, we fill the small one to overflowing.

Moreover, the discount system transforms into one large body of water a network of separate reservoirs, insufficiently connected with each other and each filled or emptied according to local supply or demand. The channel by which they are united is the discount rate, which would apply to bankers' paper alike in San Francisco and New York or in New Orleans and Seattle. It is a mistake to think that the size of a country will render such a system ineffective; for whether water is being withdrawn on one side of the basin and simultaneously added at the other far distant end, the surface of the water will be fairly level on both sides. In order to keep the hight of the water within definite limits there is a strong main which brings additional water and a wide outlet to take care of the overflow; this is the function of the central bank. Where there are several faucets and outlets—that is, branch offices of the central bank—the effect may indeed be secured more rapidly and fluctuations in the hight of the water will be somewhat smaller; but the equalizing power of the discount rate will remain the same. The benefit of fairly normal interest rates is bound to be reaped under such a system; it is only a question of the degree to which it is possible or desirable to secure this result.

Finally, we must dwell for a moment on the effect of the discount system on the highly important questions of reserves and of elastic note issue.

The central bank system and the discount system can not be separated; they are absolutely interdependent. The discount system can not exist without a central bank to which it may resort in case of need and, on the other hand, the central bank can not exist without an efficient bank rate—that is, with-

out the means of protecting itself and the nation through its power to influence upward or downward the general interest rates of the country. History has shown that without such power the central bank system fails.

The central bank must not be so intimately and so directly connected with the nation's general business that it can by its change of policy directly affect individual concerns. Between the central bank and the public there should be, as a buffer, the general banking community of the country, which should use its own credit and its own resources to modify the effect of changes in the bank rate, where the public can not so quickly adjust itself to changed conditions. But the central bank must be able to influence the banking community sufficiently to enable it to regulate the general tendency of the money rates of the country. To achieve this is one of the functions of the discount system. With such a system, and only with such a system, can the most important further development safely be reached, *viz.*, that of dividing the banking reserves of the nation into two kinds of reserves, the cash reserves and what we may call the working reserves.

Working reserves are represented by quick assets easily convertible into cash credits available to meet the demand obligations of a bank. Under a central bank and discount system these are the main reserves kept by the general banks.

Cash reserves are kept almost exclusively by the central bank, there available to permit the general banks to convert cash credits into actual cash whenever needed.

This system is based on confident and immutable reliance by the banks on the fact that against good and legitimate bills a cash credit is always obtainable at the central bank, and that no one will therefore needlessly withdraw or hoard cash. Capital invested in discounts, though considered as good as cash, yet draws interest, while capital invested in actual cash, besides entailing material risk in the safe-keeping of the same, means a loss of interest. There is therefore no danger that cash withdrawn from one institution by reason of distrust of its solvency will be hoarded instead of being deposited in some other institution and thus finally reverting to the central bank without material delay.

Overstimulation of business, or other economic reasons, may bring about an increased demand for cash at home or an outflow of gold abroad. Such withdrawals of cash the bank will, as we have already seen, meet in various ways. But actual hoarding must be a thing inconceivable in a modern country organized to settle its enormous daily business with a comparatively small amount of actual cash.

To maintain the right proportion between the demand cash obligations of a nation and its holdings of actual cash is a task requiring the minuest study and the most constant care. In Europe this is the function of the central bank, which concentrates its attention and energies almost exclusively on this duty, and which should therefore be kept free from too intimate and direct contact with the general business of the country.

The general banks, on the other hand, organized to be money-making concerns and devoting their energies, as they do, to taking care of the requirements of the general public, can not be expected individually to watch this problem of the cash reserves of the nation. Moreover, such a duty can not possibly be performed by 21,000 competing institutions, which can protect themselves only by attacking one another. There must be one central reserve to which all unemployed cash will inevitably return, and to which everybody can apply, or an acute demand for cash will unavoidably bring forth hesitation to pay in cash, as happened with us during the last crisis. Hesitation in paying cash only increases the drain, which each bank can meet only by drawing on the reserves of the other banks, and if to these unbearable conditions there is added a foolish law (unavoidable under a decentralized system) which, by making it obligatory to keep 25% of the deposits in cash, renders the cash reserves absolutely useless, there can be only one consequence, *viz.*, runs by the public, runs by the banks, hoarding by the banks and by the public alike, and finally a general suspension.

If after a prolonged drought a thunderstorm threatens, what would be the consequence if the wise mayor of a town should attempt to meet the danger of fire by distributing the avail-

able water, giving each house owner one pailful? When the lightning strikes, the unfortunate householder will in vain fight the fire with his one pailful of water, while the other citizens will all frantically hold on to their own little supply, their only defense in the face of danger. The fire will spread and resistance will be impossible. If, however, instead of uselessly dividing the water, it had remained concentrated in one reservoir with an effective system of pipes to direct it where it was wanted for short, energetic, and efficient use, the town would have been safe.

We have parallel conditions in our currency system, but, ridiculous as these may appear, our true condition is even more preposterous. For not only is the water uselessly distributed into 21,000 pails, but we are permitted to use the water only in small portions at a time, in proportion as the house burns down. If the structure consist of four floors, we must keep one-fourth of the contents of our pail for each floor. We must not try to extinguish the fire by freely using the water in the beginning. That would not be fair to the other floors. Let the fire spread and give each part of the house, as it burns, its equal and insufficient proportion of water. *Pereat mundus, fiat justitia!*

But, to continue the metaphor, the central bank and discount system provides not only for a centralization of reserves and for concerted action in accumulating and in using the same, but it also furnishes the means of reaching and of creating a new supply of water.

Most of the central bank systems provide that a certain amount of bank notes may be issued against discounted bills. It would lead beyond the province of this article to state in detail to what extent each country requires bank notes to be covered by cash and to what proportion they may be issued against discounted paper. The principle, however, is observed in all countries enjoying a central bank system, that, as all bank notes represent demand obligations payable in cash, the amount of notes not secured by cash must at all times bear a certain safe proportion to the amount of cash held by the central bank.

In calculating the amount of cash required we must add to these unsecured notes the other demand obligations of the central bank, *viz.*, deposits against which cash or bank notes may at any time be demanded, and which must, therefore, be treated as unsecured notes. As the Bank of England keeps a large part of its deposits invested in discounts, and not in actual cash, the same principle applies to it as to the German Reichsbank and the Banque de France, notwithstanding the fact that the Bank of England cannot issue any unsecured notes, while the other institutions named may issue a certain amount of unsecured notes. While the English system lacks the pliability of the German and French methods, and therefore requires more frequent and more energetic adjustment by changes in the bank rate, the main principles are the same in all three countries.

The bulk of the demand obligations of central banks, notes and deposits alike, so far as they are not covered by bullion, must be covered by discounts—that is, by promises to pay in bullion within a short time. They must be covered not by permanent but by temporary investments, so arranged that a very large amount thereof falls due every day and can thus be used to offset the cash demands made upon the bank. We have already mentioned that the holdings of the central bank consist largely of short maturities. The central bank meets the situation by collecting these as they fall due, keeping down the bank's new purchases by an increase in its rate designed to attract new purcahsers of the long paper coming into the market, and at the same time to bring about a curtailment of business. Finally, it increases its circulation and temporarily reduces its reserves.

This means sound elasticity, based on discounts, and safely restricted by the proportion maintained between holdings of cash and of discounts.

Elasticity does not mean expansion, but expansion and contraction. Contraction, we are inclined to say, is even more important than expansion. Ability on the part of the central bank in normal times to decrease its holdings of discounts and to increase its reserves, without any material disturbance, is

most essential to the system, because without such preparatory work the bank could not safely render assistance when called upon in active or anxious times. But the additional benefit of contraction is that it prevent inflation, with all its dangerous consequences.

This system is elastic not only in its structure; it is elastic also in its operation. This is a most important fact; for each situation must be dealt with on its own merits according to the circumstances of the particular case.

Thus, certain periodic and normal demands for cash, as well as a domestic drain caused by distrust, must be met by paying out freely. A foreign drain, on the other hand, must generally be met by an energetic increase of rate, while a drain both domestic and foreign must be treated by varying combinations of both methods. The discount and central bank system enables the nation to meet these situations by concerted but varying action adjusted to meet each individual case. Is it credible that in a modern country like ours men should profess to believe that all these emergencies can be met by automatic, iron-clad rules, fixing a definite percentage of reserves and an adjusted scale of taxes, applied without possible discrimination to constantly varying and contrasting conditions, and the whole problem being complicated by the disconnected action of 21,000 competing banks?

Notes issued against discounts mean elasticity based on the changing demands of commerce and trade of the nation, while notes based on government bonds mean constant expansion without contraction, inflation based on the requirements of the government without connection of any kind with the temporary needs of the toiling nation. Requirements of the government should be met by direct or indirect taxation or by the sale of government bonds to the people. But to use government bonds or other permanent investments as a basis for note issue is unscientific and dangerous.

If the Panama Canal costs $500,000,000 we shall have $500,000,000 additional currency, whether the nation needs it or not. But what sane reason can be found to make the currency of the nation dependent on whether or not we build

a canal? And why should we have more currency if we decide to build a sea-level canal rather than a lock canal? If we were not so well protected by our immense exporting power, we should suffer even worse and more frequent catastrophes through our system of issuing notes without maintaining a safe proportion between gold-secured and uncovered notes and through our device of a circulation not based on temporary investments and therefore incapable of contraction. There can not be any doubt that a continuance of such a system must prove disastrous. The economic law that bad money always drives out good money can not be safely disregarded, and it is only a question of time when its effect will show itself.

The Aldrich-Vreeland Bill, while only a temporary measure, is an important step in advance, inasmuch as for the first time it admits commercial paper as a basis for note issue; but this measure, even if enacted as a permanent law, can not bring final relief, as the note issues not only remain decentralized, but, so far as based on discounts, are grafted on prior note issues based on bonds.

This means that having been forced to stretch a rubber band for so long a time and to such an extent that it has become inelastic, we expect to restore elasticity to this old and frayed band by tying to it a small elastic piece. But by so doing we shall only have lengthened the band, which can never contract within the length which has become inelastic.

If we compare the net results of the discount system with those of the bond-secured system, we find that in Europe rates of interest fluctuate within comparatively small limits, while the outstanding circulation constantly contracts and expands within wide ranges. With us it is the reverse. The outstanding circulation, once it is issued, remains fairly stationary, while the rates of interest fluctuate violently from 1 to 200%.

The discount system enables the country to concentrate its reserves and to use them freely when needed; it brings about a clear distinction between the working reserves of the general banks and the actual cash reserves needed to protect the circulation of the country. With us such a line of demarcation can not be drawn and our reserves become hopelessly decentralized and prove absolutely unavailable in times of stress.

The discount system recognizes the fact that issuing money and making money are two entirely distinct functions, which are at times antagonistic to each other. It is the duty of the money-issuing bank to restrain the money-making bank when the latter wants to go too far or too fast. Therefore note issuing and general banking are separated in Europe, the power to issue notes being more or less centralized. With us, on the contrary, general banking power and note-issuing power are lodged in the same banks, and the note-issuing power is not centralized.

In Europe an effective discount rate protects the country from foreign and domestic drains alike, while no such protection exists with us.

The discount system mobilizes the resources of the banks. It turns the bank's most legitimate investment, its commercial paper, into its quickest asset, and by so doing creates a new means of exchange, available both at home and abroad. Under our system investments in commercial paper are tantamount to a locking up of funds, which remain fixed assets till they mature. The discount system establishes a broad market for commercial paper and this market forms the basis of the note issues, and at the same time provides for an easy adjustment of the demand and supply of money, the burden being borne by the whole nation.

Under our system notes are issued against bonds, and the daily adjustment of the demand and supply of money spends itself primarily in an increase or a decrease of call loans on stock-exchange collateral. Contraction and liquidation mean an onslaught on the security market with resultant disturbances. It is a result of the foolish attempt to regulate the big reservoir by means of the small one.

There is an old banking rule that no bank may grant credit on other terms than those on which it receives credit. The truth of this adage is obvious and the extent to which this principle is carried out is the test of safe or unsafe banking.

Safe employment of the millions upon millions deposited with the banks is one of their foremost duties. The European system has adapted itself to this problem. Our system makes

really safe banking an impossibility. An American banker invests his deposits in unsalable commercial paper and by so doing invests a call obligation in a time loan, which is bad and unsafe banking. As he is, however, practically compelled to do business in this way, he must, on the other hand, keep a large amount of assets on call in order to meet the first onrush of his depositors. In spite of the fact proved by our last panic, that, through the faultiness of our system, these call loans can not always be depended on when called and are therefore not so available as cash, it is, nevertheless, the only conservative way in which an American banker can invest a large proportion of his deposit money—unless he buys foreign exchange and thus places his money abroad. Banks have been criticized for placing so much money in stock-exchange loans and the stock exchange has been criticised for absorbing so much money. Neither of them deserves blame. It is our system that has made the stock exchange the clearing house for the money of the whole nation and that has immobilized our commercial paper. It is our system that renders the banker helpless, leaving him to choose between the Scylla of locking up his capital and the Charybdis of adding to the accumulation of call loans on the stock exchange, thus placing further weight on this colossus on glass feet.

The discount system, by creating sound conditions, makes the small bank independent and safe. Under present conditions the small bank with us is dependent in critical times on the assistance of the large institutions and on the arbitrary will of the Secretary of the Treasury, limited as this is by his (very uncertain) ability to help. The central bank, the backbone of the discount system, has everywhere proved a check to plutocratic monopoly.

We can not close this short essay on the discount system without a few words about its historical development.

We are apt to believe, on this side of the ocean, that the European central bank and discount system have existed for centuries, that this system is the natural development of conditions as they exist in those countries, and that it was achieved without those radical changes in existing systems which with us would be necessary in order to modernize our system.

This is a mistake. As will be seen by the history of the various government banks, published by the Monetary Commission, conditions in almost all the countries now enjoying a centralized note issue were in former days similar to those which now prevail with us. Aside from the Bank of England and the Banque de France, it is safe to say that all the important central banks have been created within the last forty years. The discount system has been developed to its present importance only within the last sixty years. The immense accumulation of wealth during the last half century, the phenomenal growth of capitalization and of daily transactions, brought about the fullest development of every time- and money-saving device, such as checks, stocks and bonds, clearing houses, stock exchanges, and produce exchanges.

The mobilization of the promissory note and its development as the fundamental and most essential part of the whole financial structure is probably the most important phenomenon in modern financial evolution. Without it the far-reaching use of credit tokens as substitutes for cash is neither complete nor safe.

It is inconceivable that the United States, a nation that leads the way in industrial progress and that more than any other nation weeds out old machinery and replaces it by the newest appliances, should be either unable or unwilling to modernize thoroughly its financial system and to discard old-fashioned financial machinery, which other peoples have long since thrown upon the scrap heap. We are not invited at this juncture to suggest a solution for the problem involved in modernizing the American currency and banking system, but are asked only to report the facts. We may however, state the case in this negative way: The question can not be solved by simply copying one of the European methods; for our prospective system will have to be adapted to our own peculiar conditions. But, irrespective of the shape it may finally assume, any system we adopt will prove ineffective and disastrous, unless it be constructed on bills instead of on bonds, and unless it provides for a concentration of cash reserves and of the power to issue bank notes.

CIRCULATING CREDITS AND BANK ACCEPTANCES

IN studying and teaching ancient history we lay great stress upon the names of kings and dates of battles while we unduly neglect the more important problem of how the people lived and what were their thoughts and ambitions. It is in considering this phase of history that we perceive most clearly the development of man and the progress of intellectual development, a process as yet by no means completed.

In dwelling upon such thoughts one cannot help recognizing as one of the most striking differences between primitive man and ourselves, that in the daily routine our ancestors took very little for granted, that everything they used and every manipulation they performed, they understood and did from beginning to end. In short, they were dependent entirely upon themselves. On the other hand, there is hardly anything in our daily routine that we use, or do, or even understand, from beginning to end. The activities of one day, even with the least developed of our fellow creatures, are indissolubly interwoven with those of millions of fellow beings whose products we eat or wear or use, and the most surprising feature of this evolution is that we have become quite unconscious of it.

Riding in the subway in the morning while reading our papers, do we think of the men that broke the coal, built the power-house, car and track, and that operate them at the very hour, do we think of the thousand manipulations and inventions that produced our newspaper, and of the hands that wrote, printed, and distributed it? Do we, while we are reading, think at all that we are riding at the rate of sixty miles an hour? Does the tenant of an office on the thirtieth floor think of the thousands of devices that had to be invented and applied to make the sky-scraper safe and practicable? Does he stop to consider what would happen to him if the house were not fireproof, or if he could not rely on the elevators or telephone?

We have become accustomed to rely so completely on the perfection of all these appliances and the normal functioning of the thousands of hands that coöperate in serving us during the day, that unless there be a sudden stop of a wheel, we use them without further thought. To this class of appliances that it takes millions to compose and ages to develop, and that we use without thinking, belongs the thing so important to us all, the thing commonly called "money."

In a modern system we can no longer separate actual money from the many appliances that take its place in our daily routine; they are linked together and have all become essential parts of one big machine.

The modern banking system has been likened to a huge skyscraper based on a comparatively small foundation of gold, and the many superimposed stories are represented by the immense number of all obligations payable in gold which, ordinarily, are settled by clearings of credits. The most evident and direct forms of circulating credits which have taken the place of actual gold are the bank note—forming a class by itself,—bank deposits, and checks. These are the main tenants of the towering structure. But they in turn have sublet a great many floors to all the other appliances for clearing indebtedness, all of which in the final analysis are being reduced to payments by exchange of bank credits. Time will not permit of dealing fully with the inter-relation and the functions of all these tenants of the building; we shall only casually mention the most important phases.

A modern system aims at establishing standard values for which a broad market can be created, so that assets can be quickly turned into bank credits. This is one of the most fundamental principles of modern banking, of equal importance for depositor and banker. Our most important staples are no longer dealt in in individual lots, which must be personally examined before the bargain can be struck, but they have been standardized, and special exchanges have been organized in order to reduce merchandises into bank credits in the quickest way and to offset all purchases and sales so as to reduce to the minimum the actual use of money.

We have achieved the same perfection in dealing with stocks and bonds. While the original part ownership in a business could be transferred only by protracted negotiation and by finding a new purchaser who, after full examination, would take the place of the old owner, evolution has brought about the corporation, issuing stocks and bonds in easily transferable shape, so that these forms of investments and indebtedness also have been mobilized. They, too, have been developed into securities for which large special markets and organizations have been created, enabling the owner to transform his holdings with the greatest possible dispatch into bank deposits. In this respect stocks and bonds have become circulating credits; they are the means of transferring part ownership in, or the indebtedness of, a corporation from one owner to another in quick succession. But while the bank note and the check are clearers of credits on demand, stock and bond transactions are clearers of credits on time, or even for an indefinite period. They are only indirect and secondary.

The most important of the sub-tenants is the commercial paper. In a modern system the promissory note, running for a limited number of months, and representing some kind of a commercial transaction, has been mobilized by adding to it, by indorsement on the back, or by acceptance on the face, the banker's guarantee. Thus the old-fashioned "bill"—existing already in the form of bricks in the age of Hammurabi—is being transformed into a "bill of exchange." Thus an immovable investment is turned into a quick asset. The importance of this evolution is two-fold, because it is just as fundamental for the safety of the individual bank as it is for that of the whole credit banking system. The main assets of a deposit institution ought not to be stocks and bonds, nor loans on stocks and bonds, but commercial paper. But a bank, the deposits of which may be withdrawn on demand at any time, must have assets which can be reduced to bank credits within the quickest possible time and with the smallest possible loss, if any.

If a banking system, like ours, is built up on promissory notes which have no free market, the consequence must needs

be that when deposits are withdrawn heavily, or when there is a strong commercial demand for money, stock-exchange loans must be called and holdings of securities must be sacrificed, these being the only available liquid assets. This means great economic waste and often calamity, for it is an absolutely perverse system that expects a *normal* investment demand, in times, especially, when money is scarce, to be able to supply a sufficient sum to satisfy all the immense commercial demands of the entire nation. Moreover it follows that prices of securities have to be so far reduced that at bargain, or sometimes panic prices, an *abnormal* demand for securities at home or abroad will be stimulated. This method is not only wasteful, but, as the past has shown us, it is most dangerous. A modern system must provide the means which banks can rely upon to enable them to market their bills receivable, which represent the trade and commerce of the nation. In a modern system this can be done without appalling losses, there being no question of sacrifice of capital in selling securities, but only a question of difference in rate of interest in selling paper. Moreover, it can be done without creating a panic; since gradual liquidation of commercial paper means a reduction of the volume of all commerce and trade, which is adjusted by coöperation of every toiler and consumer. It is thus spread over a hundred million of people, instead of falling back on the holders of stock-exchange loans and investors, few in number by comparison. While our system has remained entirely archaic and primitive in this respect, Europe enjoys the full advantages of a highy developed discount system, which averts panics there with as much certainty as we may expect their occurrence with us.

Commercial paper and bank acceptances form the main assets of European banks. These bills have the widest possible market, where millions are exchanged daily with margins of $^1/_{16}$ or $\frac{1}{8}$ of 1% in the interest rate, without the necessity of scrutinizing the paper when the bargain is struck. Bills of exchange have been standardized, everybody in all parts of the globe knows what names of the many thousands that appear as indorsers and acceptors are considered as "good

delivery," and everybody knows against which names there is discrimination. The daily differences are normally regulated in the case of European banks by means of larger sales of bills receivable or by larger investment in these bills.

The mobilization of the promissory note, the system which enables Europe to transform bills into bank credits as quickly as staples or securities, is the explanation of Europe's success where we have failed.

To insure safety for such a discount system, however, to render it possible and effective, a central reservoir for all the cash of the nation is necessary, as, inversely, for the safety and efficiency of the central reservoir a system of exchanging bills is a prerequisite.

If a system constructed upon credit is to be safe, the first condition is that cash must be less valuable or attractive than the bank credit.

Holding of cash entails the risk of loss or robbery; it is a source of danger, like ammunition which we keep under our roof. Moreover, to keep cash unemployed means a loss of interest. Depositor and bank alike must therefore try to turn cash holdings into interest-bearing bank credits with the greatest dispatch and to the largest degree that may be possible and permissible. This alone will allow cash at all times to return freely and rapidly into a central reservoir, as provided by modern financial systems; this alone will allow the central organization to respond freely to any demand for cash, because the latter cannot fail to return through some other channel, unless it be taken for export.

But in order to secure the free flow of cash into a central reservoir it is a prerequisite that there must be absolute confidence (1) that there is enough cash to meet all emergencies, (2) that it will be freely forthcoming when demanded, and (3) last and most important of all, that the banks will be able, in case of need, to build up with such central organization a cash credit upon the strength of which they can withdraw cash, if such be required from them. It follows, then, that, under a modern system, there are two entirely different duties to be performed by the general banking institutions and the

central organ. The former must see to it that they can command cash credits to meet their demand obligations, but it is the duty of the central reservoir to see to it that these cash credits be always transformed into actual cash when required.

The means, however, by which banks transform their assets into cash credits with the central organization are the rediscount of bills purchased, local or foreign.

Commercial paper, transformed into bills of exchange easily marketable at all times, forms the means of connection between the central organ and the banks; it constitutes the elevator system of the skyscraper, which alone renders the evergrowing tower safe and habitable.

This division of functions and this means of connection between the central institution and the individual banks cannot be too clearly understood.

In Europe the general banks have no cash reserves, they have credit reserves. The duty to transform credit into cash resting on the central organ, it alone is concerned in the holding of adequate gold reserves and in watching that a certain and safe proportion be preserved between the aggregate demand obligations of the nation and its holding of gold. The existence of such a strong supervisory organ and its ability to maintain the nation's credit creates that safety for the circulating credits of the nation which renders the whole system possible. For it is the confidence in these circulating credits which creates the broad market for money, always flowing where it can earn interest in safety, and it is in turn this free flow of money, attracted or driven away by a higher or lower rate of interest, which protects the central organ. By increasing or decreasing its rate of interest, thus taking a larger or smaller part in the nation's investments in commercial paper, by accumulating or selling holdings of foreign bills of exchange, the central organ exercises a regulative influence which keeps it strong enough to protect each bank individually in case of need, thereby safeguarding the whole nation.

Safety, from the point of view of banking investments, consists of two elements: the one, the intrinsic value; the other, its market. A consideration of these two factors produces

the stipulation of the interest return that the investment must produce.

International money may flow to England and buy three months' British bank acceptances at $2^1/_{16}\%$, while for three months' English time money it would possibly demand $3\frac{1}{2}\%$; the difference between the two rates showing the difference in value between a quick asset and an investment for a definite period. But, even a comparative rate of 4 and 5% could not cause international money to be invested largely in American commercial paper; since not only is it an unsalable, unliquid investment, but it has not been standardized. It is individual and provincial in its character, while the American banks which, knowing the maker of the note, might render it liquid and salable abroad, must not, under present conditions, freely indorse or accept it. Moreover, as long as there is lacking with us a central organ that would guarantee its market in case of need and secure at all hazards the transformation of cash credit into cash, foreign money will remain cautious and the interest inducement must remain comparatively exorbitant.

Contemporaneous financial history furnishes us constantly with illustration showing the superiority of the European system. We have not only lived through the disgraceful collapse of our own machinery, but, quite recently again, we have seen the advantages of European financial methods. During the recent Morocco crisis a war scare developed in France and actual hoarding of gold began; the withdrawals from the deposit banks were at a given moment alarming. But there followed no panic. The Banque de France issued notes freely, the French banks collected their holdings of foreign paper and the general confidence in the Banque de France's power to cope with the situation overcame the fright without the calamities that would have ensued with us.

When France, for reasons just explained and as a means of political pressure, withdrew from Germany more than two hundred million marks that had been invested there, when English and Russian money was called back, when runs began upon some savings banks, Germany had to face a very severe strain. But what happened? The German

Reichsbank rapidly increased its credit facilities by about $150,000,000; moreover, it had accumulated in times of ease vast sums of foreign bills, and when rates of exchange moved up to a point warranting gold exports, it began to sell these foreign holdings. At the same time a comparatively slight increase in its rate took place which brought new money, mainly American, to Germany's assistance. This inflow of foreign money was increased by the sale abroad of German treasury notes.

What would have become of Germany without the Reichsbank?

Without the confident reliance that the Reichsbank would be able to meet the situation and without its ability to apply all these various means of defense, general suspension would have been inevitable. It is the elasticity of such a system that renders it safe, and it is the implicit confidence that it inspires, that made our bankers send their money, without hesitation, in spite of a critical situation, in order to secure for a few months a beggarly ¼ to ½% interest per annum more than they could have obtained at home. We had no war scare, the country was full of gold in 1907, but rates of 50 to 100% could not bring money, because our system—or rather our lack of system—had killed our own confidence in our own credit. We have no credit system, but a discredit system. The advantage of a big central organ, not run for profit like the general banks, but administered solely for the protection and safety of the nation, is plainly shown by Germany's recent history.

The complete withdrawal of money from "gainful occupation," turning it into idle cash to serve as means of legitimate assistance in times of need (a real and effective reserve in that respect, not a nominal one like our ineffective idle funds, which are termed reserves by a misnomer) and the quiet accumulation of foreign bills—less profitable than the German bill carrying a higher rate of interest—could be brought about and brought into effect only by such an institution.

It is the inefficiency and the discredit of our system which

severely handicaps us also in our foreign trade; for a foreign purchaser will rather buy merchandise to be paid for in sterling than in dollars and for the shipping of goods purchased abroad, be it South America or Asia, the American merchant has to provide European bank acceptances, because the acceptance of the American banker, no matter how good his credit, has no market. We pay an annual tribute of millions to Europe for the financing of our trade, which is not only a wilful national waste, but also a blemish on our financial standing.

A wonderful change will take place in all these respects if the bill now in preparation by the Monetary Commission, be passed on the lines suggested by Senator Aldrich. Without creating a central bank—for all the far-reaching banking powers have been eliminated which are characteristic of European central banks—and without fundamentally disturbing existing banking methods, merely by a simple device of federating the now scattered reserves into one general reservoir to be jointly administered for the protection of all, our system will be changed from a provincial, old-fashioned, wasteful and dangerous one into a national, modern, economic and safe structure.

Our system—at present a tottering, top-heavy sky-scraper without a solid foundation—the tenants, instead of uniting in constructing a safe substructure, have solely concentrated their efforts on strengthening and fortifying each his own flat—a towering fire-trap, provided with an old-fashioned staircase as the only means of communication for all its disconnected tenants—with one stroke becomes modern and safe. Or, as I said on previous occasions, the 20,000 to 30,000 scattered pails of water, representing our disconnected bank reserves, will be united into one large reservoir, with a system of pipes leading to every house, bringing safety to all by coöperation.

While the solution is simple in principle, it had to be complicated in form; for it had to satisfy even the most suspicious mind that control and abuse of power by individuals, singly or combined, political or financial, would be absolutely impossible, and it had to take into consideration that a modern

discount system cannot be created by a stroke of the pen and that, therefore, a new device had to be invented to bring about a safe and effective mobilization of the present form of American commercial paper. Both will be achieved under Mr. Aldrich's plan. It is true that we shall have to create a machinery more cumbersome in operation and not quite so far-reaching in effect as the European system, but a careful consideration of all the details convinces the student that a simpler way would not be a safe one.

The plan, carried out on its present lines, will by process of federation bring about a centralization of reserves with a guarantee of decentralization of banking facilities. It will strengthen the independence of the smaller banks, and while restricting the National Reserve Association to the smallest possible field of operations, it will give to this association power enough to protect the nation in the future. It will bring about the mobilization of our commercial paper and, in encouraging bank acceptances, it will help us to finance our own trade, and to establish in doing so the first basis for the development of an American discount market, a step of the greatest importance for the future of our country. The National Reserve Association will be able to accumulate foreign exchange, and thus to act as a protector of the nation in times of need. It is also to be hoped that some way may be found to enable it from the beginning to meet emergencies by being in a position to sell short treasury bills of the United States.

The National Reserve Association, if enacted into law, will take the monetary system of the United States out of Wall Street. Instead of a rigid system, the slight elasticity of which is now based on stocks and bonds, we shall enjoy an elastic system based primarily on commercial paper, bank acceptances, and foreign bills.

I have almost concluded my address without dealing with the bank notes which, as circulating credits — the subject matter alloted to me—ought to have been treated prominently. In beginning to study the subject of monetary reform one is apt to think that the question of note issue is the primary one. After some years of struggling with this problem, one learns

to understand that the question of effective reserves and liquid credits is the main question, and that note issue is only a secondary phase and of lesser importance.

If any bank, rediscounting with the Bank of England, Reichsbank, or National Reserve Association, may take gold against its credit balance, there is, from the National Reserve Association's point of view, no difference between this balance and a bank note against the presentation of which gold may be demanded. Bank notes are deposits in bearer form. The liability for bank notes and deposits is the same. For each deposit can be turned into bank notes, and each bank note into a deposit, and inversely, and for the same reason, it is immaterial whether a general bank owns a bank note or a credit balance with the Bank of England, the Reichsbank, the Banque de France, or the National Reserve Association.[1]

Some of our leading financial papers appear not to have grasped this point fully. Because national banks are not allowed to count their own notes as reserves, it is argued that the notes of the National Reserve Association also should not be counted as reserves. But the difference is obvious.

The National Reserve Association could not count its own notes as cash; returning notes will not be treated as an asset, but will be charged off, reducing liabilities. In order to avoid confusion, our present national bank notes must be considered collectively in this connection. From that point of view national banks must treat their own notes, like checks on other banks, as clearing values; as assets but not as cash. The notes of the National Reserve Association are liabilities of an independent institution endowed with a huge capital and organized for the sole purpose of providing for the payment in gold of all its liabilities, including its notes. If the balance with such a National Reserve Association is to be counted as

[1] Mr. Aldrich has very wisely, and I believe for the first time in banking history, made the liability a subject of measure and taxation—not alone the note issue as in France and Germany. To my mind the law would be even more perfect if the clauses taxing the note issue were left out entirely. In France and Germany, where an effective check system does not yet exist, note issue is the barometer of expansion, while with us and in England deposits play the more important part.

cash, as it should be, the note certainly must be counted as cash, too.

When one of our leading financial weeklies advanced the argument that such notes should not be counted as reserves because they are not so counted in Europe, it went far afield. For as we have seen, in none of the leading European countries is there any law requiring general banks to keep cash reserves nor do these banks generally keep more cash than they actually need for their daily business. Neither could it strengthen the general system if they accumulated gold reserves. Quite the contrary, it would interfere with the free flow of gold into the central reserve where, becoming the basis of an elastic system, it can do vastly more for the efficiency and safety of the whole system than if locked away in a single bank. Since we possessed no central organ for the consolidation of our reserves, we had to have laws requiring each bank to accumulate reserves of its own. This archaic and unfortunate method can, however, now be turned to good account. For this direct coöperation in strengthening the reserves of the National Reserve Association—which coöperation, in this form and to this degree, does not exist in Europe—is all the more necessary since, through the lack of a highly organized discount system and through the restrictions placed upon the scope of its operations, the National Reserve Association would otherwise not command the strength and the confidence enjoyed by European central banks. In other words, with us the elevator service being less perfect—in the beginning at least,—the foundation must be so much broader.

The fear that notes counted as reserves would attenuate the basis on which our banking system rests, would apply with equal force to balances kept with the National Reserve Association which, under the new plan, may be counted as reserves. This possibility of attenuation is the very element of elasticity.

It is the function of the National Reserve Association to see to it that all its liabilities—balances and note alike—are fully protected by an ample supply of gold and by a credit so strong that nothing can shake it. But a system without the

power to expand, no matter how large its gold holding, remains vulnerable. Elasticity wisely safeguarded—as in this plan—is the basis of confidence and therefore of safety.

Not infrequently one hears the question: If it be true that the National Reserve Association will democratize our system and to a large extent turn the banks' call money into the bill market, taking it away from Wall Street, why should the latter favor the new law?

The answer is plain: This overflow of money, which in times of ease floods New York, and which, when needed, is withdrawn with such vehemence that it causes violent convulsions, is a constant source of danger to that city. While our present system makes New York the undoubted money center and gives to its banks a position of pre-eminence and predominance, this power is possessed only at the expense of a responsibility, which, with our present system, in times of stress brings mortification and humiliation. Wall Street, at present, is a ruler on a keg of dynamite. And, like many an absolute ruler in recent years, it finds it more conducive to safety and contentment to forego some of its prerogatives—thrust upon New York not by its own will, but as a result of our present laws and conditions—and to turn an oligarchy into a constitutional democratic federation.

But that is not all. We are a nation still in its formative period, full of ideals and ambitious imagination. It is not the hunt for the almighty dollar that prompts men, possessed of millions, to keep on toiling and struggling with nature and with their fellow creatures. It is the youthful and boundless energy craving for constructive success, the joy of creating and the conscious and unconscious desire of taking a hand in the triumphal development of this great country. Our ambitions are great, and it hurts our pride that, while we have become powerful, and are leaders in many respects, we are an object of contempt and of ridicule when it comes to the question of our monetary system. We cannot become a center of international finance on a par with European countries, until we reorganize. If New York has to make some sacrifice in order to achieve this aim, she is willing to do her share, just

as every part of the country will have to contribute. Whatever little advantage may be lost in the beginning will be more than counterbalanced by the safety and continuity of our financial life. The United States enjoying a modern financial system will attain that place among the nations which should be hers by destiny, and she will weather in safety and dignity the storms, from within and without, that may be in store for her. A modern financial system will enable the banks fully and safely to finance the future growth of this country and, *vice versa,* a healthy growth of the country is bound to bring prosperity to the banks. The sky-scraper placed on a solid foundation will safely carry many additional stories, and the tenants will be at once secure and prosperous.

THE OWEN-GLASS BILL AS SUBMITTED TO THE DEMOCRATIC CAUCUS

Some Criticisms and Suggestions

NOW that we have before us the Owen-Glass Bill in the definite form in which it has been submitted to the Democratic caucus, it may be interesting dispassionately to analyze it and to establish wherein it differs from and wherein it agrees in the main points with the bill of the Monetary Commission.

It is a source of great satisfaction to note that, as the Republican party had to outgrow and to abandon its old doctrine of "currency issued by national banks against government bonds," so the Democratic party had to relinquish its old heresies of the 16-to-1 silver standard and the guarantee of deposits. Both parties are now agreed that reform must provide for "a currency"—to use President Wilson's own words—"not rigid as now, but readily, elastically responsive to sound credit, the expanding and contracting credits of everyday transactions, and the normal ebb and flow of personal and corporate dealings."

There is a further and even more important progress. Both parties have now recognized that it is not the "currency" which is the exclusive or even the chief factor that needs reform, but that, indissolubly interwoven with this question is the problem of rendering available and efficient the now immobilized reserves of the country, and of mobilizing and modernizing the now illiquid American bills of exchange by creating a "discount market" and "bank acceptances." Both parties are thus in agreement as to the ends to be striven for; more than that, they are agreed even as to the technical means by which they must be attained. Accordingly, both plans provide for concentration of reserves, for the creation of an or-

ganization for the purpose of rediscounting commercial bills, for the substitution of an elastic note for the present national bank currency, and for a conversion of the 2% government bonds into 3% bonds.

The country is to be congratulated upon seeing these theories and principles clearly established; it remains the nation's duty conscientiously to watch that the aims now professed by both parties be carried into effect in the best possible way, and that they be not lost through ignorance, prejudice, or considerations of party policy. Where there is agreement as to the fundamentals, it should not be impossible to reach an accord as to the means, provided they be honestly sought for.

There were five main criticisms of the Monetary Commission's plan, and it is chiefly on these points that the Owen-Glass plan differs from its predecessor.

Mr. Aldrich's critics claim:

1. That there is too much concentration of power and that this power is placed almost entirely in the hands of the banks or their representatives.

2. That a uniform discount rate for the whole country would not be practicable.

3. That the size of the balances to be kept by the subscribing banks with the National Reserve Association is not defined.

4. That the National Reserve Association, after taking over all the 2% government bonds, is not sufficiently protected, because, although it would assume the responsibility for the entire national bank note issue, it would be prevented from selling the United States 3% bonds in case of emergency (except $50,000,000 per annum and that only after five years).

5. Finally, it is claimed that currency should be issued only by the government of the United States and not by a semi-official body.[1]

As to point 1, the writer partly agrees with these critics; as to 2, 3, and 4, he entirely agrees; as to point 5, however, he totally disagrees with them.

[1] This article does not aspire to be a comprehensive criticism of the Owen-Glass bill in all its details, but has for its purpose the discussion only of these main points.

Let us analyze each point consecutively:

The Monetary Commission's plan proceeded on the theory of the Bank of England, which leaves the management entirely in the hands of business men without giving the government any part in the management or control. The strong argument in favor of this theory is that central banking, like any other banking, is based on "sound credit," that the judging of credits is a matter of business which should be left in the hands of business men, and that the government should be kept out of business. The Aldrich plan, therefore, provided for only a moderate amount of government control; but on the other hand it restricted the powers of the central board and the scope of the branch boards to such a degree, and it proposed so democratic a system of electing directors, that its author hoped to satisfy the nation that the concentrated reserves of the United States and the note issue would be safe in the hands of this National Reserve Association. The Owen-Glass bill proceeds, in this respect, more on the lines of the Banque de France and the German Reichsbank, the presidents and the boards of which are to a certain extent appointed by the government. The writer is inclined to think that the latter form is the one better adapted to modern nations. These central banks, while legally private corporations, are semi-governmental organs inasmuch as they are permitted to issue the notes of the nation—particularly where there are elastic note issues, as in almost all countries except England,—and inasmuch as they are the custodians of practically the entire metallic reserves of the country and the keepers of the government funds. Moreover, in questions of national policy, the government must rely on the willing and loyal coöperation of these central organs. Much is therefore to be said for the theory of centralizing reserves and note issue in the hands of a semi-official private corporation under a mixed administration of business men and government appointees, the managing officers being appointed by the government.

In strengthening the government control, the Owen-Glass bill therefore moved in the right direction; but it went too far and fell into the other, and even more dangerous, extreme.

In France and Germany the central banks are entirely free from any sectional or political color. An officer is appointed on the strength of his qualifications, generally after a long training and gradually rising in rank; a director is elected on account of his standing in the business world; all irrespective of their political faith, and they will remain in office according to their merits and independent of whether the liberal or conservative party be in power.

In our country, with every untrained amateur a candidate for any office, where friendship or help in a presidential campaign, financial or political, has always given a claim for political preferment, where the bid for votes and public favor is ever present in the politician's mind, where class prejudice and antagonism between East and West and North and South run high, in a country so different from these European states, a direct government management, that is to say a political management, would prove fatal. Moreover, in Europe the banks are not required to furnish the capital of the central banks, nor are they obliged to keep balances of such size as will be necessary with us, where the banks and the government will be the only depositors of the Federal Reserve Banks. The banks, therefore, should be satisfied that the administration will be carried on without bias and upon sound business principles. There can be no doubt but that, as drawn at present, with two cabinet officers members of the Federal Reserve Board, and with the vast powers vested in the latter, the Owen-Glass Bill would bring about direct government management.

The Owen-Glass Bill provides for the creation of twelve Federal Reserve Banks as against the one National Reserve Association, with fifteen branches, as proposed in the Aldrich Bill. The National Reserve Association is theoretically the simpler, sounder, and, in effect, the more efficient structure. The freest possible return of idle cash into one large reservoir is best assured by a single organ, and its larger strength and uniform policy render feasible the creation of a real discount market and the performance of other functions, such as accumulation or disposition of foreign bills, and gold transactions, which are necessary for the safety of the structure.

Moreover, as we shall see later, a single organ of vast strength is in a position to solve in a more effectual way the question of government bonds and note issue. Messrs. Owen and Glass were moved to adopt the Federal Reserve Bank system, not only because Senator Aldrich had adopted the other, but because the absolute centralization frightened a great many who are afraid that in some way or other "Wall Street" might secure the key to this great chest. Although, in the writer's opinion, this apprehension was unwarranted, still this fear existed and had to be taken into account. Moreover, it was thought impossible to have one discount rate govern the whole country; and justly so.

In dividing the country into separate districts, each having its own Federal Reserve Bank and its own rates, it was hoped to counteract the danger of centralization of power and to render each district independent of the others. It seems that the framers of the law were in the beginning impressed with the idea of creating from twenty-five to thirty such centers, or even a larger number. The longer they dealt with this question, however, the clearer it became to them that the number had to be reduced and, furthermore, that some way had to be found to coördinate these separate entities, or rather to subordinate them under the domination of one central power.

It is clear that, if a large number of separate Federal Reserve Banks should be created without any such superimposed organ, instead of having a free back flow of idle cash into one center, we should have competitive hoarding of gold at each central point. This would destroy the basic principle of the plan, which is that the reserves of one part of the country, where there would not be any seasonal demand, should be available for another, where crops might just be moving. Without a central organ the result would have been that these independent and weak Federal Reserve Banks would have had to depend on the strongest among them for assistance. In other words, New York would have become the center dictating the country's financial policy, instead of having it formulated and carried out by a body of men from all parts of the country, as under the Aldrich plan.

It became apparent then: first, that the number had to be reduced in order to make the units larger, and thereby more independent; and, second, that it was necessary to coördinate these units under a central board. Thus the number was reduced to fifteen, and later on to twelve, and the Federal Reserve Board was created. While these moves were in the right direction, they did not go far enough, for the proposition as it now stands is not as yet a practicable one. Let us see how it would work.

As an illustration we shall assume that a Federal Reserve Bank is established with the minimum capital permitted under the law, of $5,000,000 paid in, that is, a nominal capital of $10,000,000. This would presuppose a paid-in capital of the banks constituting this Federal Reserve Bank of $50,000,000. Let us assume that the deposits of these banks would amount to five or six times their capital, that is, $250,000,000 to $300,000,000. Of these, 5% would have to be paid in as balances with the Federal Reserve Banks, that is $12,500,000 to $15,000,000. Of these it should normally have no less than 66⅔% in reserve, equal to $8,000,000 to $10,000,000, leaving about 10% of the capital of the constituent banks, or $4,500,000 to $5,000,000 as available in normal times, and an additional 10% for special demands; after which the limit of a gold reserve of 33⅓% would have been reached. This illustration presupposes that the banks, having paid in 10% of their capital, would want to reimburse themselves by rediscounting an equal amount with the Federal Reserve Bank, which means that the capital of the latter would be normally invested. But assuming that the capital would be uninvested, the total amount available for the accommodation of the constituent banks would even then be only 30% of their capital.

This permits of several conclusions. It shows, first, that while the Aldrich plan left entirely optional with the banks the size of the balances to be kept with the National Reserve Association, permitting them to count both balance and lawful money in their vaults as reserve, the Owen-Glass Bill, while correctly stipulating a minimum balance of 5% of the deposits, errs in setting at the same time a minimum limit also for the

amount of actual cash to be kept in the vaults of the banks. From the point of view of strengthening the Federal Reserve Banks, and thereby the banks themselves, the balances with the Federal Reserve Banks, that is their cash holdings, ought to be increased as far as possible. The banks ought to hold only as large or as small an amount of actual cash as they actually need for their daily business, and all unnecessary cash should be deposited with the Federal Reserve Banks. Allowing for an ample supply of till money, but leaving the determination as to its size to the free judgment of the banks, it is safe to estimate that the aggregate gold holdings of the joint Federal Reserve Banks could be increased by some $200,000,000. The joint loaning power would thereby be strengthened by twice that amount. In estimating this increase it has been assumed that an amount equal to at least 2½ or 3% of the aggregate deposits could be safely counted upon. In our illustration this would mean that about $7,500,000 would be added to the funds of the Federal Reserve Bank, of which $2,500,000 normally, and a maximum of $5,000,000, would become available for the contributing banks; which would increase the total to 40% of their aggregate capital. The very object of the law should be to reduce to the smallest possible sum the amount of cash hoarded in the banks and to increase to the largest possible size the concentrated reserves in the Federal Reserve Banks. But it would be a mistake to attempt at this time to do more than to free and to consolidate the cash reserves, now wastefully impounded in the banks. It would be inadvisable to add to these vast sums substantial portions of the cash balances now kept with reserve agents as part of the legal reserves. These balances are now actively employed by the reserve and central reserve banks; if withdrawn from these banks and replaced by actual cash in vaults, or by balances with the Federal Reserve Banks, the accommodation heretofore granted to the community by the reserve and central reserve banks will have to be provided by the Federal Reserve Banks; that is to say, the regular business done by the banks will have been taken away from them, and the Federal Reserve Banks, which

properly should act primarily as reserve institutions, providing the elasticity for extraordinary demands, will have been forced into the normal business, from which they should try to keep away.

Unless it be clearly understood by legislators and banks that the Federal Reserve Banks must not be used in normal times to finance the country to any substantial degree, the latter will fail to serve their purpose, because their funds will not be available when the real "pinch" comes.

The balances with reserve agents should therefore be left undisturbed to a certain extent, or if we are to break with the old system of counting one bank's balance with another as a cash reserve, on the ground that such balance really is not cash, then we must concede that our system, as it stands today, implies a reserve of only 6% for country banks, of 12½% for reserve city banks, and of 25% for central reserve city banks. It is with these actual cash reserves that the nation's banking business has been done, and, if properly organized, we can safely assume that they would be sufficient. No other nation requires cash accumulations or balances with central banks of such size.

If the new law eliminates these bank balances as reserves, it ought to provide for a corresponding reduction of the reserve requirements; not to the full measure of these bank balances, because a certain degree of liquidity was assured by the old system, but to a large extent.

It would appear entirely practicable to reduce the reserve requirements of the country banks from 15% (of which 6% were in vaults and 9% with reserve agents) to, let us say, 10%; of the reserve city banks from 25% (of which 12½% were in vaults and 12½% with reserve agents) to 17%; and of the central reserve city banks from 25% to 20%.[1] The law should then provide that of these reserves a balance of no less than 50% would have to be kept with the Federal Reserve Banks. This would mean a minimum of 5% for country banks, of

[1] Provided there are only a few central reserve cities; if there were more than four or six there would not be any justification in requiring them to keep reserves so much larger than the other cities.

8½% for reserve city banks, and of 10% for central reserve city banks. The writer has, however, no doubt that the balances would in fact be much larger, because there would not be any reason for the banks keeping more cash at home than they actually need for their daily business. On the other hand, the size of the balances generally kept by a bank with the Federal Reserve Bank—and thereby for the benefit of the entire community—would have some bearing on the consideration which, in case of need, may be claimed from the board of the Federal Reserve Bank. But whether this suggestion be adopted or not, there can be no doubt whatsoever that nothing can be gained by impounding an unduly large amount of cash in the vaults of the individual banks, or by unduly locking up their now free funds. If properly consolidated and organized, the present cash reserves ought to prove sufficient; if linked together in an unsound and inefficient manner, the inclusion of the bank balances will not avail. If, after a few years of active operation, it should become necessary to increase the balances, the law can be easily amended to that effect. But it is most important to avoid all unnecessary convulsions at the beginning.

As the law is now framed our illustration has shown that probably eight out of the twelve Federal Reserve Banks, thrown back on their own power alone, would not be able to provide the necessary facilities during seasonal or abnormal demands. The smaller the circle for each Federal Reserve Bank, the more acute would be its embarrassment, because the demands of its constituent banks will be simultaneous, the dominating industries of the region not being sufficiently varied. The larger the circle of each Federal Reserve Bank, the stronger must be its own intrinsic power.

But even with larger units than are provided by the Owen-Glass Bill, the law would not achieve its purpose unless it ultimately brought about a market for bills and bank acceptances and a free and natural interplay of reserves between the various centers. The business normally done by central banks must be only a fraction of the aggregate discounting done by the general banks, banking firms, corporations, large and

small, and in particular by foreign banks and governments. When the cotton crop is to be moved, not only the southern Federal Reserve Bank or banks must provide their limited share, but the local banks in those parts of the country where money is not in so strong demand during that season should be ready to buy southern bills. In doing so they would rely on their own ability to rediscount in turn their own short maturities with their Federal Reserve Bank or depend upon the broad market for discounts, in which they could, in case of necessity, resell these bills with their own indorsement. Can such a market, which is an absolute prerequisite for the safety of the entire structure, be developed with a system of twelve Federal Reserve Banks as now proposed? The answer is a most unqualified " No."

The basis of a discount market is confidence; confidence in its large absorbing power and in its reasonable rates. By " reasonable " I mean to imply rates that can be foreseen by " reasoning," by summing up all the natural influences—and the extraordinary ones too—that may contribute to shape money rates in a rising or falling direction. Both these elements would be lacking under the Owen-Glass plan. With twelve discount rates (even though a good many might be generally the same), with twelve competing centers, with twelve conceivably different discount policies, a large discount market cannot develop. A market develops where purchasers and sellers meet. Locally the majority of the small finance centers will be purchasers; but, as between the various centers, they will on balance almost invariably be sellers. No open discount market will therefore develop in such smaller centers. It could, however, develop in the large centers like New York, Chicago, St. Louis, Boston and Philadelphia, if it were not for the arbitrary powers vested in the Federal Reserve Board.

If, at these large centers, the banks could rely on a natural development of the discount rates, they would not hesitate to invest freely in bills instead of keeping their working reserves (not the legal ones) in "on-call money"; but what means have they to cast any reasonable prognostication as to the course

of such rates? The New York Federal Reserve Bank's position may be very strong and the Federal Reserve Banks at Boston and Chicago may be in an equally good condition. Eastern banks might therefore be quite willing to buy southern paper at 5½% while the official bank rate of the Federal Reserve Bank at New York presumably might be at 5% and that at New Orleans at 6%. But here comes the Federal Reserve Board and issues its edict that the Federal Reserve Bank of New York rediscount $10,000,000 each from the Federal Reserve Banks at New Orleans, Seattle, Kansas City, or, perhaps, Denver, Salt Lake City, Minneapolis, or Duluth. To what extent these requirements will be made and on whom they will be made, whether on New York, Chicago, or Boston, no banker will be able to foretell, nor will anybody know to what points the money may be directed. In the face of such conditions the call-money market will remain the standby of the banks; for they will not incur the risk of investing in discounts while the discount rate, instead of developing according to the natural free flow of credit and money, jumps according to the whim of a largely political body. With an election coming — and an election is always coming in the United States—how strong a probability is there that a demand from Seattle or Dallas (be they over-extended or not) for money from the East will be refused? How strong a probability is there, in the face of some political agitation, that a depleted New York would receive money, even were it its own, from the South or the Far West? And even if the majority of the men constituting the Federal Reserve Board were entirely free from political considerations (which they cannot possibly be because some are political officers and owe it to their party not to disregard the political aspect of the case), what training, what ability would they command to pass upon these business and banking questions so as to enable them actively to run the banking business of the entire country? For not only is the discount rate of each Federal Reserve Bank "subject to review" by the Federal Reserve Board; not only has this board the power of throwing the reserves from one part of the country to any other part that it pleases; but the board

will fix at its own discretion the rate at which "federal reserve notes" will be "advanced" to the Federal Reserve Banks. To this latter question we shall have to revert later.

While it is true that, by the addition of the Federal Advisory Council, a very commendable improvement has been made, because through it the Federal Board will have an opportunity of at least learning facts concerning general conditions which otherwise it could not possibly know (though it remains entirely optional with the Federal Board to act on these facts, or rather upon local or political pressure); while it is true, furthermore, that the arbitrary powers of the Federal Board have been somewhat "toned down," none the less the proper working of the entire system will depend upon the wisdom with which the Federal Board exercises its functions, in particular that of "permitting or, in time of emergency, requiring Federal Reserve Banks to rediscount" paper of other Federal Reserve Banks.

It has been argued with great insistence that the Federal Board should not be clothed with the power of "requiring Federal Reserve Banks" to rediscount for each other; but it is the weakness of the entire plan that without such power lodged in some group of men the whole structure would fall to the ground. With twelve Federal Reserve Banks the *permission* to rediscount for each other is a theoretical option of which they would hardly ever avail themselves. If the Federal Reserve Bank of New Orleans should happen to have a bank rate of 6%, against rates of 5% in the majority of the other zones, and if the Federal Reserve Bank of New Orleans became crowded, facing the necessity of increasing its rate to 7 or 8%, what would happen? Would New England or Pennsylvania or Chicago or New York of their own accord apply for permission to grant a loan? If money should be plentiful in these regions, the boards of these Federal Reserve Banks would argue that their individual constituent banks should take as much paper from the New Orleans banks as they thought safe and good business, but they would not for a moment consider it wise or incumbent upon themselves to weaken the reserve power of their own Federal Reserve Bank

for the benefit of the New Orleans Federal Reserve Bank, shouldering thereby a burden which would otherwise fall on the remaining ten Federal Reserve Banks. In order to avoid the semblance of a central bank, the structure has been torn into twelve separate entities; but as the majority of these units are unable to stand alone, and as safety lies in union only, there must be some arbitrary power to take the place of the links that are missing in the structure. The further decentralization has gone, where centralization is the end to be sought, the vaster and the more arbitrary those powers must be.

With twelve units, for the deliberation and coöperation of which with one another the law does not contain any provision—excepting the Advisory Council, which may advise the Federal Board but may not act—the initiative and executive power for any joint or individual action between these Federal Reserve Banks must rest solely with the Federal Board.

This is most unfortunate, because for these seven outsiders, who constitute the Federal Reserve Board—outsiders because, living in Washington, they all stand outside of active business and they cannot possibly ever be in direct touch with the same—it is a problem beyond any man's power to decide wisely which of these twelve Federal Reserve Banks is to receive a rediscount and which of the remaining eleven, and in what proportions, shall grant the same.[1]

There will, therefore, be no natural flow of reserve money, nor any free flow of money, into these disconnected discount centers. Important open discount markets will not develop; because neither Europe nor the large American banks will

[1] The law provides "that the interest charge to the accommodated *bank* (we take this to mean the accommodated *Federal Reserve Bank*) shall be of not less than one nor greater than three per centum above the higher of the rates prevailing in the districts immediately affected." This must be a mistake. If New Orleans's "Bank Rate" is 7%, its Federal Reserve Bank can take discounts only at the uniform rate of 7%; why then should it sell its assets at 8% or 10% in order to accommodate at 7% some banks, conceivably those that have expanded too much? If the Federal Reserve Bank of New Orleans can borrow only at 8%, its bank rate should be not only at least 8%, but rather higher in order to keep down the expanding banks of the region and in order to draw money into the dry district from other banks of the United States o. Europe.

trust a system of this kind, which does not insure a sufficient mobility for commercial paper. Consequently the banks will not be enabled to dispense with their present habit of keeping a substantial proportion of their assets in loans "on call." For the sake of creating some provincial centers, which will be centers only in name, and which, standing alone, will not be able to provide the needed relief, the efficiency of the whole system will have been sacrificed.

But while a system of twelve Federal Reserve Banks will prove a failure, it will be well-nigh an impossibility to reduce the number later on. It is difficult to withdraw privileges once granted, even though their elimination would be of general benefit. On the other hand, it would not be hard, at any time, to increase the number, if this should prove advisable later on. Meanwhile, under a system of a small number of Federal Reserve Banks, discount markets would have developed, and the nation would have an opportunity of judging itself whether or not those were true prophets who predicted that the "discount market" would remove the concentration of money on the stock exchange, and whether or not the fear of a "tyranny of credit" will survive under the new system.

There are further phases of this problem that we must consider:

The Owen-Glass Bill contains elaborate provisions for the development of bank acceptances and for dealing in foreign exchange. Both provisions are most appropriate, for without creating an effective machinery covering these two items the law would not achieve its aims.

If we want to finance our own foreign trade, if we want to establish a standard banking paper with a large market at home and abroad, great pains must be taken to develop these bank acceptances (not only those of subscribing banks, but also of our private firms; for the banks alone could not provide all the necessary facilities.) The accepting bank receiving a commission of between ¼ and ½% for giving its three months' acceptance, the discount rate for bank acceptances will have to be about 1 to 1½% lower than the rate for single-

name promissory notes. Though it would be better business for the Federal Reserve Banks to buy 45-day paper at, let us say, 5½%, they will have to make it a point to have a private discount rate for bank acceptances of, let us say, 4%. This private discount rate must meet the English, French, and German rates in the world's market, and, unless the Federal Reserve Banks make special efforts to make the American rate reasonably low, no American bank acceptance will take the place of the European ones, no matter how many foreign banks may be established under the American flag.

Which of the twelve Federal Reserve Banks is to carry this burden? They all will want to earn their 5%, for which the margin does not appear to be very large as the bill is drawn at present, and they all will strive to make the surplus earnings beyond 5% as large as possible, since they are to receive 40% of such excess. There are several reasons, however, why the 5% dividend is not so amply assured as it was under the Aldrich plan: (1) Under the latter plan, the treasury money was deposited free of interest, while under the Owen-Glass Bill interest is to be allowed to the treasury. (2) Under the Aldrich plan the profit on over $700,000,000 national bank notes, which were to be assumed by the National Reserve Association, and the profit on any further note issue, was to go to the National Reserve Association. Under the Owen-Glass Bill the Federal Reserve Banks will have to pay interest on the notes to the government, so that it may not be sure that any profit will be derived by them from this source. While the National Reserve Association's profit was limited to 5%, the balance going to the government, the margin was so large that all transactions which were to be done, for the public welfare, with small profit or even at a loss, could be carried out without encroaching on the 5% dividend. It is a fair question whether, in view of these conditions and considering the vast powers of the Federal Reserve Board to interfere with the profits of the Federal Reserve Banks, the Government should not guarantee a minimum return to the stockholding banks—let us say 4% as maximum and minimum, —and permit the banks to dispose of their stockholdings at

their pleasure, selling the stocks to them above par, and using the premium for the establishment of a surplus fund.[1]

If we review our considerations at this point, we find that the result of the division of the country into twelve Federal Reserve Banks, under the Owen-Glass plan, would be the destruction of a reliable and strong discount market, the weakening of the reserve power of the country, the undoing of the hope of developing on a broad basis the American bank acceptance, and the sacrificing of a strong and efficient foreign exchange and gold policy. On the other hand, while all these advantages of a frank centralization have been lost, the Owen-Glass plan cannot avoid the same degree of centralization, which, however, it brings about by conferring autocratic powers upon a small group of men. And because the technical decentralization into twelve units has gone too far, the individual powers, which are to take the place of the well-knit links of a single organization, must necessarily be too far-reaching. They become a danger to the whole structure and, at the same time, to those who are to be the responsible officers of the Federal Reserve Board.

The remedy is a simple one. If the framers of the Owen-Glass Bill, continuing in the same direction in which they have moved up to the present, will further reduce the number of the reserve centers, the very serious objections to the present law may easily be eliminated.

In the writer's opinion a system of four Federal Reserve Banks, with centers at New York, Chicago, St. Louis and San Francisco, with a Federal Reserve Board at Washington, would under the circumstances form the best possible solution.

[1] The plan of permitting the Federal Reserve Banks to participate in any profit secured in excess of 5% does not appear to be sound. It would act as a stimulus toward activity and money making, where the main duty of these Federal Reserve Banks must be conservatism, and a strong tendency to remain in reserve without any consideration of sacrifice of profits.

It would be better to allow the stockholders a return of 5½ or 6%, under a liberal system that would permit them to earn this dividend even with the greatest conservatism, than to permit them a share in the excess profits under a narrow system that would rather force them to do business in order to be quite sure of even their 5% dividend.

If it be objected that by such a division New York, which would include New England, would become too strong, a system of six Federal Reserve Banks would still be practicable, though less safe and efficient. Any larger number the writer strongly believes to be pernicious. It may be well to bear in mind that with any further increase in number of the Federal Reserve Banks, New York's weight could not be much reduced, and the larger the number of the Federal Reserve Banks, the more acute will become the disproportion of New York's power as compared with that of the other centers.

Let us contemplate now how a system of four or six Federal Reserve Banks will meet the various difficulties that we have discussed. For simplicity's sake we shall discuss a system of four Federal Reserve Banks, but if six should be decided upon, the argument, though weakened, will still remain the same.

A system of four Federal Reserve Banks would offer to the people a guarantee that New York could not in any way have any direct influence upon the management of the banks in the other parts of the country. (The New York Federal Reserve Bank would embrace New England, New York, New Jersey, Pennsylvania, Delaware, Maryland.) The country would be as safe in this respect as it would be under a system of twelve Reserve Banks. On the other hand, what have we gained? The accumulations of reserve money would be so strong in each of the four centers that a sectional seasonal demand could be readily taken care of; all the more because with four large units, four powerful administrations with a distinct and strong policy, important discount markets will develop. We should then have a real concentration of reserves and a real mobilization of credit. As to bank acceptances, foreign exchange, government bonds and note issue, these four Reserve Banks could agree upon a joint handling of these (perhaps for a joint account to be based upon the capital of each Federal Reserve Bank.) Four large concerns will be able to agree upon a disinterested policy; twelve local Federal Banks, with unequal powers, and naturally more sel-

fish interests, never will. The idea prevails among some critics, that twelve centers will take better and fairer care of the country than four. This idea is unfounded. The reverse is the case. The question of the branches of the National Reserve Association and of the Federal Reserve Banks has, in the writer's opinion, never been sufficiently considered in detail. If a free system of transfers from one part of the country to the other is to be established, if balances with Federal Reserve Banks are quickly and easily to be created and used for the purpose of clearing, then all important cities must have branches and all minor cities must at least be within easy reach of a branch. It will be impossible to establish an effective system of transfers of balances with twelve zones, within the boundaries of each of which the easy transfer would remain confined. There are between sixty and seventy cities now that are entitled to branches, or where branches are necessary to cover certain sections. Let us take cities like Cincinnati, Cleveland, Toledo, Columbus, Indianapolis, Detroit, Milwaukee, Minneapolis, St. Paul and Duluth. They all would be entitled to branches, and they all could be be branches of Chicago. If we were to pick out one of these and make it a Federal Reserve Bank, the others, almost equal in importance or possibly superior, would fare poorly by becoming tributary to, and dependent on, an organization weaker than Chicago. But this must happen with twelve centers. Moreover, it is hard to imagine that a federal reserve city should not become a central reserve city. To create twelve central reserve cities would defeat the very idea of central reserve cities — we need not enlarge upon that thought — but with twelve federal reserve cities we could hardly escape that necessity. By adding San Francisco to the list of the existing three central reserve cities the question might be solved without difficulty with a system of four centers.[1]

[1] With four Federal Reserve Banks one could imagine that each Federal Reserve Bank city would become a central reserve city; each city where there was a branch (and only those) would become a reserve city. If the accumulation of reserve money with reserve agents is to cease, the main motive

If six centers must be created, we must suppose that New Orleans and some other city, presumably Boston, would have to be added. (But, again, the South, grouped around New Orleans, will be less efficiently provided for than by grouping a larger Southeast around St. Louis. Even New Orleans itself would fare better as an important branch than as a comparatively weak Federal Reserve Bank.) In other words —to use again our old metaphor, often employed in the last six years,—in order to procure fire protection for the entire community we must provide faucets in as many places as we possibly can (*i. e.*, the branches), but we must concentrate the water so that we may have enough for any emergency. If we cannot concentrate all the water into one central reservoir, let us at least see to it that there shall be only a few and large ones. Small reservoirs will quickly run dry, thereby creating consternation, and any other small reservoir, that may be drawn upon, will quickly show the effect, again causing anxiety and, as a consequence, an increased demand. Large reservoirs can stand a drain without an alarming drop of the gage and, if interconnected, they can assist one another without much sacrifice and without creating any convulsion or alarm. Twelve interconnected reservoirs would be a complicated system, inefficient in its results and to be handled only in the most arbitrary and haphazard way.

To insist on a large number of Federal Reserve Banks because, it is argued, reserves ought to be kept where they originate, is a selfish and narrow doctrine. For some charitable minds it may be a comfortable feeling of safety to see their neighbor's house burn down and to shut off from him their own water supply. But when their own house happens to be on fire they may find some fault with such a system. More-

in the determination of central reserve and reserve cities will have been eliminated. On the other hand, the position occupied by a city in the organization of the Federal Reserve Banks will become a very important factor, and inasmuch as there will be a certain concentration of business wherever there is a branch or a head office, it may be logical to require banks in these centers to contribute in a more substantial degree to the reserves of the nation than the other banks which in the future would constitute the "country banks."

over, with the key in the hands of a board appointed by the President, they should be able to overcome this provincial point of view.

As to the organization of the four Federal Reserve Banks and the Federal Reserve Board, it would not be difficult, while preserving machinery similar to that now proposed in the Owen-Glass Bill, to begin by organizing the branch boards, which would be responsible to, and under the control of, the boards of the Federal Reserve Banks. The latter would be constituted from members of the branches, and some members would be appointed by the Federal Reserve Board. Each branch would have a manager to be appointed by the board of the Federal Reserve Bank. Each Federal Reserve Bank would have a governor to be appointed by the President, from lists to be submitted to him by the board of the Federal Reserve Banks, which lists the President might return, asking for a new set of names. These governors would be first-class, expert men, who should receive large salaries in order to render them independent and in order to make the position an attractive one for men of the largest caliber. The Federal Reserve Board should consist of these four governors, three additional members to be appointed by the President, and to these should be added the governor-general to be appointed by the President in consultation with a committee consisting of delegates from the Federal Reserve Banks. It should not be difficult upon a basis of this kind to agree upon a constitution of the Federal Board satisfactory both to Congress and to the business community. The Secretary of the Treasury and the comptroller of the currency ought to be members of a board of supervision.

With units so large and a Federal Reserve Board thus constituted the powers of the latter may remain almost unchanged; but it is submitted that it may not be necessary to destroy the independent character of each Federal Reserve Bank by making it obligatory for them to rediscount for each other at the request of the Federal Board. If there be only four Federal Reserve Banks, the heads of which are members of the Federal Reserve Board, at which they would meet one another, they

might be relied upon to stand by one another voluntarily —in particular if they have to deal jointly with government bonds, bank acceptances, foreign exchange, and note issue— and the law may be easily amended in case they should not.

In the writer's opinion cabinet members should not be members of the active board. It would be safer both for these officers and for the country if men whom duty toward their party compels not to neglect the political aspect of each case should be kept away from this post. Moreover, secretaries resign, or, in the course of events, they change, whereas it is most important that the members of the Federal Reserve Board should gradually become experts like the members of the Interstate Commerce Commission. There are no cabinet members on this latter commission, nor are there any on the Supreme Court, with both of which the Federal Reserve Board has been compared. Inasmuch as the Democratic party appears to have set its mind on exclusive government control, the writer's proposition, as above outlined, bears fully in mind this prerequisite even though he may consider it extreme. The plan as here proposed would not allow a single member on the Federal Board not appointed by the President; but none the less it would gain the confidence of the business community and overcome its objections, because the four governors of the Federal Reserve Banks, who would be thoroughly familiar with actual banking and business conditions in their respective zones, would have an opportunity and duty to confer frequently with one another, and would have an important voice in the shaping of the policies of the Federal Reserve Board. The remaining three members would be free from any political pressure. The Democratic party's principles would have been fully respected, and yet grave dangers and defects would be avoided.

But, no matter what conclusion may be reached in this respect, and what form the Federal Board may take, the dangers and iniquities of government management would be materially reduced by the establishment of only four Federal Reserve Banks. The more the Federal Board is called upon to deal only with composite bodies—that is, a number

of varied elements massed together—the more it is protected from political pressure. The local demand would address itself to the Federal Reserve Banks; the Federal Reserve Board at Washington would deal only with questions of policy, applying to groups that would be so large that the divergent interests of the various component parts would in themselves eliminate any provincial color, helping the Federal Board to deal with its problems without fear or favor, in an absolutely statesmanlike, unbiased way.

A structure of this kind would have the advantage, as against the Monetary Commission plan, that, while there would be among the four reserve banks one policy of expansion or of contraction, they could each adapt their rate to their own conditions, as against the uniform discount rate for all the country proposed in the Monetary Commission plan. The Federal Board might even have power to permit a Federal Reserve Bank to establish a higher rate for a single branch, when it appeared necessary to curtail a particular over-expanding branch or community, without wanting to affect by a higher rate the entire zone of the Federal Reserve Bank.

A structure of four (or six) Federal Reserve Banks would offer the greatest advantage in dealing with the government 2% bonds and the note issue. With both of these features the Owen-Glass Bill deals in a most unsatisfactory way.

In the first place, our currency is already redundant and we should begin with the existing maximum as the minimum, because national bank currency, based on government bonds, does not materially contract. We should provide for a possible increase of $500,000,000, though this limit has now been removed by law, but for a decrease of only $35,000,000 for the first year. The entire national bank currency ought to be converted into elastic currency from the beginning. What do we gain by spreading this conversion of bonds and notes over twenty years? There is every argument for a prompt conversion.

The present proposition is unsatisfactory for both the government and the banks. If we consider that within the last twenty years English, French, and German government bonds

have gone down about 20%, anybody would be a bold man who would dare to foretell at what price United States government 3% bonds will sell within the next twenty years. If the United States should embark upon any national enterprise entailing a material issue of bonds, the price certainly would go down. Should United States 3% bonds sell below par, the national banks would, of course, not convert. The national bank note issue, in that case, would remain outstanding for twenty years, when the United States would have to sell a 3½% or possibly a 4% issue to take the place of the old 2% bonds. The present proposition, then, gives the option to the national banks to convert in case the 3% United States bonds sell above par, while, if they sell below, the United States will have to take the loss. This is a poor proposition for the government; on the other hand, it is the minimum that, in fairness, could be offered to the national banks.

The Aldrich plan proceeded on correct lines in converting the 2% bonds all at once and in assuming the entire national bank note issue. It went astray when it provided that these bonds were to be kept from the market for five years and were to be sold only at the rate of $50,000,000 per year after that period. This meant that the National Reserve Association, having assumed over $700,000,000 on-demand obligations, would have had its hands tied if it had been called upon to protect these liabilities—an unsound position.

The problem is not an easy one. If we imagine that after twenty years the national banks would have disposed of all their bonds to the public, we must expect that, on the other hand, at the period there will be required at least the same amount of circulation as we have to-day (and more according to the increase in population.) That means that federal reserve currency will have been permanently substituted for national bank currency, let us say to the extent of $700,000,000 to $800,000,000. But currency cannot be issued without something having been given in return for it, which means again that, inasmuch as the Federal Reserve Banks would not own any government bonds against these outstanding notes, they must have other assets to that extent—that is, mainly, com-

mercial paper. It follows that, in addition to their own capital and part of their deposits, the Federal Reserve Banks would have *permanently* invested about $800,000,000 in commercial paper, and to this we should then have to add the extraordinary and seasonal demands for which $500,000,000 were estimated to be issued, a total of about $1,300,000,000 to $1,500,000,000. This would not be a healthy condition, for *normally* the Federal Reserve Banks should not be so deep in business, they should become such heavy investors in commercial paper only in times of active demand. It would therefore be desirable to find a way of investing several hundreds of millions of dollars otherwise than in commercial paper, provided that these assets were safe and quickly salable. It is from this point of view that the following suggestion is made.

Let the four Federal Reserve Banks jointly assume the national bank note issue and let them take over jointly, in proportion to their respective capitals, the 2% government bonds. Let the government convert half of the amount so taken over into 3% 20-year bonds, the other half into one-year 3% treasury notes of the United States. As long as their charters last the Federal Reserve Banks would jointly bind themselves, whenever these one-year notes matured, to buy at par the same amount of new one-year 3% treasury notes. The advantage of this plan is obvious. For the United States it is indifferent whether they issue a twenty-year bond or a one-year bond the renewal of which at par has been guaranteed for twenty years. But the position of the Federal Reserve Banks would be immensely strengthened thereby. For, in case the Federal Reserve Banks found themselves in a situation where they wanted to strengthen their position or create a balance in foreign countries, they could at once sell these short treasury notes, if not on a 3% basis, let us say even on a 6% basis. In serious times the loss incurred would not weigh heavily, because money at home would then be in strong demand and bring more than that rate. By such a sale the price for the long-term government bonds would not be affected in anxious times, when these could be

forced on the market only at great sacrifice and at the risk of tearing down the price of all other securities. On the other hand, these United States one-year treasury notes — which might be issued so as to mature half in January and half in July—would be a quick asset, a most suitable investment for the Federal Reserve Banks. With $350,000,000 of such an investment it might be quite safe to preserve the holding of the remaining $350,000,000 in twenty-years bonds. If it should be found that the available liquid means of the Federal Reserve Banks should be permanently increased, it can safely be left in the hands of the Federal Board to dispose of them gradually in favorable times and in quantities that the market will readily absorb.

While the government, in following this suggestion, would continue to run the risk of having to renew the 3% bonds at their maturity on possibily a 3½ or 4% basis, it would on the other hand preserve its chance of securing the advantage of a sale of the 3% bonds above par, in case the investment market should take a favorable turn. It would not grant a one-sided option. Furthermore, the profit on the circulation would from the beginning be received by the Federal Reserve Banks—that is to say by the government—and the earnings of these Federal Reserve Banks would show an ample margin over and above 5%, the importance of which we have already emphasized.

This presupposes that sound counsel will prevail, and that, in the face of the emphatic protest coming from all parts of the country, the framers of the Owen-Glass Bill will ultimately abandon their intention of letting the government issue the new notes. One need not be a prophet in order to be able to foretell that this heresy will have the same fate as the 16-to-1 silver standard and the gurantee-of-deposits plan, and that after a few years people will wonder how they could ever have considered seriously so absolutely unsound a theory.

Though, as against its original form, Section 17 of the bill has been materially improved, it still remains a puzzle to the writer how, in practise and in theory, it will work out in any satisfactory way. Is there to be a uniform rate for the

"advances" of these Federal Reserve notes? Or will the government undertake to discriminate between various parts of the country? Is this rate to be different from the bank rate in the Federal Reserve districts?

Neither the constituent banks nor the Federal Reserve Banks, when granting accommodations, can know whether the ultimate customers will use this book credit for the payment of book debits (that is, by check), or whether it will be employed to discharge debts that cannot be paid by checks, and whether, consequently, notes will be required. Notes that have been issued to-day may again be turned into book credits to-morrow. They are interchangeable, and, from the Federal Reserve Bank's point of view, they ought to be treated alike, both as deposit liabilities. To cut these functions in two, to attempt to let the book credit and the note—twin brothers—be born by two different mothers, is a most anomalous proceeding. But, we must ask, how would it be possible at all for the Federal Reserve Banks to act boldly and comprehensively with their problems, if they cannot rely on being able to provide circulation as long as they are within the limits of the law concerning their cash reserves and collateral? While it is inconceivable that the Federal Board should ever refuse to grant an advance to a Federal Reserve Bank in sound condition, still this arbitrary power given to the board would be a menace and an unnecessary source of weakness to the whole structure. Moreover, is it at all reasonable that a Federal Reserve Bank should not be in a position to figure what its investments in discounts will return? To illustrate: If a Federal Reserve Bank buys from the Sixth National Bank $100,000 of 60-day paper at 6%, and the latter draws a check against this rediscount, the Federal Reserve Bank nets 6%. If the Sixth National Bank, or its customer, should draw $100,000 in notes, and if the Federal Board should charge 6% for "advances," the Federal Reserve Bank would not receive any return at all from the investment. Why punish the Federal Reserve Bank, and indirectly the people, for issuing a legitimate amount of circulation? If the Federal Reserve Bank's earnings above the 5% dividend are well as-

sured, the amount charged for the advances will be put from one pocket of the United States government into the other.[1] If there should be any doubt as to this 5% dividend, would it not stand to reason that the Federal Reserve Bank, if it had ample cash reserves, would rather pay out its lawful money than pay for the costly "advance" of Federal Reserve notes? This is, of course, the very last thing the government ought to encourage, but we can hardly see how this consequence can be escaped under the law as drawn at present.

But these "advances," when carefully analyzed, are nothing but a myth. Sooner or later, but within twenty years, under the Owen-Glass Bill, there will be outstanding $700,000,000 of federal reserve notes (which will have replaced the national bank notes), and in addition such notes as may have to be issued to take care of extraordinary demands, together, let us say, between $1,000,000,000 and $1,200,000,000. Against these notes "which will be the obligation of the United States," the United States will have no assets of their own whatsoever. The treasury balances, of about $100,000,000, are to serve for certain specified obligations of the government, and are neither available nor sufficient for the purpose of securing these federal reserve notes. The government relies absolutely on the Federal Reserve Banks to pay these notes when presented. It has no money to advance to these Federal Reserve Banks and it has no money to pay the federal reserve notes when presented. As long as the note is in circulation, the government kindly grants the "advance;" as soon as the note is presented for payment, the Federal Reserve Banks have to cash it. In other words, if we thread our way through this bewildering maze, it is not the government that gives the advance, but the public which holds the notes that grants the credit. In other words, it is

[1] As a question of revenue to the Government a tax on note issue is superfluous when the excess earnings go to the Government. If the tax is created for the purpose of acting as a sentimental check on over-expansion—unnecessary, because an effective one is being applied by the bank rates—it ought to be based on "*liabilities*" (comprising deposits and notes issued) and gold cover. But, in a country in which the deposit-and-check system is so highly developed, it would be impracticable to apply the brake on the note issue alone.

not the United States upon whom rests the primary obligation, but the Federal Reserve Banks. The United States are the guarantors of the notes, which the treasury would be called upon to pay only after the Federal Reserve Banks are in default.

Why then not put it into a clear form? Why not let the Federal Board at Washington issue these notes—under the supervision of the treasury—for the joint account and as the primary and joint obligation of the Federal Banks, the United States, in consideration of the profits to be received and against collateral, as proposed in the Owen-Glass Bill, guaranteeing the notes? It is this the writer makes bold earnestly to recommend. The status of both the Government and the Federal Banks would thereby become clear.[1]

Under the Owen-Glass Bill the Federal Reserve Banks set aside a gold reserve for notes which they have not issued and which do not appear as their liability. The United States Government, on the other hand, is to issue up to $1,200,000,000 of notes, and against these no gold cover would appear on their statement; but as a cover they would show only the indebtedness of the Federal Reserve Banks. There is not sufficient differentiation between contingent and direct liabilities and contingent and direct assets. The Federal Reserve Banks are asked to assume practically the direct obligation for a contingent liability, and the United States figure a contingent asset as a direct asset. The writer proposes to put direct assets and obligations into the same balance sheet, and the contingent assets into the same balance sheet with the contingent obligations.

This is not a question of bookkeeping only; it has a most vital bearing upon the question of direct responsibility or contingent responsibility in the management of the Federal Reserve Banks. If the United States issued the notes as their primary obligation, if the Federal Reserve Board fixed any interest rates for these advances, the government would

[1] The guarantee by the United States is not a necessity; the notes would be good enough without the same; but as a matter of expediency it would appear wise to follow this course.

establish a direct connection and direct responsibility which, as we have shown, it is most important to avoid. If the method suggested by the writer be followed, any political pressure addressed to Congress or to the executive for a lowering or raising of rates, a freer or less free supply of facilities, in any particular part of the country, would be promptly turned off by the statement that while the government undertakes the responsibility for supervision, for installing an efficient and honest management, it could not have any direct influence upon the business of the Federal Reserve Board or the Federal Reserve Banks.

It is the world's acknowledged theory and practise to keep the obligations of the central banks distinct from those of the government. It would lead too far to present a full argument showing the advantages of the semi-official central bank over a direct government organ. It may suffice here to refer to the gold loans granted in critical times by the Banque de France to the Bank of England, a transaction that in 1907 we should have been only too glad to bring about for the United States, but could not achieve because there were no modern American bills and no central organization. A semi-official organ can bring about a transaction of such kind, which would be hardly compatible with the dignity and the duties of a government. This is another reason for keeping the government in a "contingent position," but not in the first line of battle.

History has shown that the Banque de France survived when the government of France went to pieces; it remained unchanged whether France became an empire, a commune, or a republic. History has shown that by keeping the central banks and the governments separate entities, they become mutual supports. The government is a customer of a central bank; at times its largest depositor, at times its heaviest borrower. The government's credit strengthens the central bank, the central bank strengthens the credit and power of the government. Where government credit and bank credit have been mixed up, the consequence has been to weaken both. Are the United States, under the presidency of a man

of science, going to throw this universal experience to the wind?[1] The friends of the present administration, and any good citizen, for that matter, cannot too earnestly warn it not to insist on any extreme measure that would antagonize wide circles of business men and the very element through the agency of which alone the benefits of the law can accrue to the people of the United States. While technical parts of the measure will have to be amended as the country develops, it will prove the greatest curse for the nation if the fundamental structure should not become a permanent one. Extreme party policy now applied will bring extreme revision whenever the Democratic party should happen again to become the minority party; and the Federal Reserve Bank, instead of being a rock standing unmoved and unshaken by the waves of party strife, will become its very plaything, a fate to be avoided at all hazards. We cannot set business free by tying it in turn to the chariot of every conquering party. Wise moderation alone will insure the safety and the continuity which are the basis of prosperity.

It is sincerely hoped that amendments on lines here submitted will be adopted. As the bill stands to-day it is vastly inferior to the plan ultimately submitted by the Monetary Commission. In its present form the Owen-Glass Bill is fraught with serious dangers, and it would not be able to bring about those remedies and benefits that the country is entitled to expect. The suggestions made in this article take into full account the political requirements of the problem.

A reduction of the number of Federal Reserve Banks from twelve to four would not violate any principle. The demand for government control would be carefully complied with, and the notes would remain "obligations of the United States," with the difference only that they would express what in essence they are under the law, and that interest charges for "advances" would be eliminated. In dealing with the 2% government bonds as here proposed, no principle

[1] We cannot dwell here upon the harm and danger that would follow the watering of the United States gold currency, which would militate against our securities and our "discount market."

would be involved at all, but the practical importance of this change for the safety of the entire structure cannot be overestimated.

Amended on these lines, the writer feels confident that the law, though not ideal, will redound to the benefit of the nation and be a credit to the party under the auspices of which it was created. The writer deems it wise not to burden this article with a discussion of a number of questions of a more technical nature, preferring at this time to center attention on the main points at issue. He hopes that it may not be considered a presumption on his part, if, just returned from Europe, after an absence of several months, and out of touch with the general discussion now taking place upon the subject, he ventures to make these suggestions. But the active interest which he has taken in developing the ideas on the main lines of which legislation is now proposed may, he trust, justify his effort to point out some pitfalls which may prove fatal and which can easily be avoided.

THE OWEN-GLASS BILL: SHOULD THERE BE FOUR OR EIGHT FEDERAL RESERVE BANKS?

THE amendments to the Owen-Glass Bill submitted by the two Senate committees show most satisfactory progress in many respects, and we may congratulate ourselves that complete agreements have been reached upon many fundamental questions. On two main points, however, the two committees still earnestly disagree; these are the number of the Federal Reserve Banks, and the control of their management. It is fortunate that in this part of the controversy each side is right and each side is wrong. For this situation carries in itself the possibility of a wise compromise.

Senator Hitchcock and his friends are to be congratulated on the sound stand they have taken in the question of the reduction of the Federal Reserve Banks to a maximum number of four. There is absolute unanimity among all students of the question that the establishment of a discount system, bringing about fluidity of credit and reserves, can best be secured by one central bank. The writer has gone to particular pains to gather the expressions of views of the most prominent men in Europe, among whom are the presidents of a number of European central banks, leading financiers and heads of the largest financial institutions of Europe. They all agree that one central bank would be the best means of developing a discount system. While a majority insist that this is the only way, a few concede that there is a possibility of developing a discount system with several central banks. But all agree that in that case there must be as few as possible and that they must be tied together in an effective way by a business management free from political influence. They also state that if Europe is to be counted upon as an investor in our future American discounts, it will be a prerequisite that there be a free market for such discounts at home. It is clear

that unless the European investor can count on his ability to resell such discounts in case he should desire to do so, he would have to consider the purchase of American discounts as an undesirable lock-up of money. If Europe should hesitate to take our American paper freely, our discount system will lose 75% of its beneficial power. That a discount market would develop with a system of eight Federal Reserve Banks, is out of the question. I do not wish to tire the reader by repeating the arguments which I have already advanced in a previous article,[1] but I venture to append quotations from some of the letters of these European authorities.[2] I am giving only abstracts from these letters, omitting the strong arguments they contain for a central bank and against a note issue by the government, these two points having passed beyond the phase of further deliberation in the present controversy. These men, some of whom are at the head of institutions of the same character as those that we are about to create here, state in unmistakable terms the grave dangers that would arise from a political influence in the management of such banks, and it is on this question that Senator Hitchcock and his friends go astray, while the views expressed in this respect by Senator Owen and his colleagues cannot be too emphatically endorsed. We need not enlarge upon the consequences that would follow a government management of the branches. It might debase and corrupt our entire political life, if the fate of the management of the Federal Reserve Banks and their branches should become the plaything of politics. No matter how we safeguard the government management in the beginning, a nation that flirts with the recall of judges may at any time break down safeguards that we may now impose and all the offices, from that of director down to that of hall porter, may become the spoils of the conquering party. One need not emphasize what consequences this might entail for our political and business life.

[1] *Cf.* p. 173, *supra.*

[2] The quotations appearing as an appendix in the original pamphlet are here omitted.—Ed.

In dealing with the question of whether there should be four or eight Federal Reserve Banks, we have to concede that in certain respects both sides are right.

From the point of view of securing a strong system and of safeguarding a possibility of developing effective discount markets, there should be only four. From the point of view represented by the Owen wing, that an intimate touch ought to be established between the management of each Federal Reserve Bank and the district which it represents, and that each district should be certain of receiving the fullest consideration it is entitled to, a system of eight Federal Reserve Banks would appear desirable. Furthermore, it is true that, if we pipe-lined all branches up to four points, a great many of these branches would be located far away from the points of concentration, that the machinery would, therefore, not respond quickly enough and that the sympathetic touch might be lost. The object to be achieved then is to secure the concentration into four units, strong and independent enough to stand on their own feet and to develop fluidity of reserves and a discount market of their own, without at the same time losing by such concentration the necessary touch with the constituent communities.

The writer has repeatedly expressed his belief that in preparing this law insufficient attention has been given to the question of the branches. It is at the branch office that the actual business will be done. Any favoritism or any unfair discrimination will express itself at the branches, where bills are handed in for discount. Sound judgment and business knowledge must be shown here, where alone the character of the bill can be scrutinized and understood. It is therefore most important that the board of these branches be wisely constituted, and the law, to the mind of the writer, errs, when in this most important point it simply leaves discretionary power with the Federal Reserve Board and the Federal Reserve Banks. In the writer's opinion the law should not begin by prescribing the election of the Federal Reserve *Bank's* board, but it should begin by providing for the election of a board of each *branch*. Let the organization committee or

the Secretary of the Treasury designate those 70 or 80 cities where branches are to be established, and provide that the member banks allotted to each branch elect their board on lines similar to those provided by the Owen-Glass Bill for the election of the board of the Federal Reserve Banks. The writer would then suggest that Class "A" be elected by the member banks and that the representatives of these member banks on the board be permitted to be directors or even officers of member banks. They should have a slight majority in the board, while Classes "B" and "C" should be appointed by the government. Directors of Classes "B" and "C" would be elected from classes other than bankers; Classes "A" and "B" would constitute the discount committee, Class "C" would become the committee on supervision. The chairman of this committee on supervision would act as chairman of the board. We should in this way constitute a local board which would be representative of all classes, which would command the local knowledge necessary to deal with the local paper, and in which the government would secure a vote and absolute supervision.

The plan that I have in mind would then provide for the establishment of eight regional Federal Reserve Banks, each, let us assume, with about eight branches. But each regional reserve city, for its own local business, would have to be treated exactly like a branch, and therefore we should have, including the regional reserve city, up to nine organizations, or, let us say, nine branches in each region, being a total of about seventy-two points at which offices would be created. It is not necessary to start with the full number of these branches in each case, nor need it be limited to eight. However, I am inclined to think that there will not be much less than 72 when the whole organization has been mapped out and there will be many more as the country develops.[1]

[1] While the suggestions here made appear to be radical they can be embodied into the law with comparatively few changes not disturbing the general lines of the bill. They follow the structure of the Banque de France and the Reichsbank, where there are local boards at the main branches. As the system develops, agencies or sub-agencies are established as feeders of the

Let us now assume that the law is amplified, so that a number of these branch banks (let us say up to nine), would, in forming one regional reserve bank, elect a board consisting of one member to be designated by each branch bank.[1] We should then have eight regional reserve banks, let us say at New Orleans, St. Louis, Chicago, Cincinnati, New York, Boston, San Francisco, and at some other far-western point, *e. g.*, Denver.

I should now propose that in each case two regional reserve organizations be linked together into one district, so that New Orleans and St. Louis would form one District Federal Reserve Bank, with its head offices in St. Louis. The Chicago and Cincinnati District Federal Reserve Bank would have its seat at Chicago. Boston and New York would together form a District Federal Reserve Bank at New York, and the Denver and San Francisco Federal Reserve Bank would probably have its seat at Denver.[2]

The boards of these District Federal Reserve Banks would be constituted of four members each, to be designated by each regional reserve bank, and to these would be added the governor and two deputy governors to be appointed by the President of the United States. They would be chosen from lists to be submitted to the President by the eight members of

branches, or the number of the latter is being increased. The Banque de France has now one head office, 128 branches with local boards and 71 auxiliary offices and 312 agencies, together 383, which are attached to the branches. The German Reichsbank has now one main bank at Berlin and 20 main branches with separate boards, in addition 76 branches and about 400 side branches.

[1] If there should be less than five branches, each branch might designate two members.

[2] If it were thought wise to have three regional reserve banks to cover the Pacific Coast, it could be done under this plan without interfering with its general structure. There might be three regional reserve banks, *viz.*, one at San Francisco, one at Seattle, and one at Denver or Salt Lake City. The three would have one stock capital, and each would designate one-third of the members to the district board, which would have its seat at the most centrally situated point,—probably Denver or Salt Lake City. Similarly if at a later time it should be found that Pennsylvania and Maryland should be divorced from New York, the New York district might be divided into three regions instead of two.

the board of the District Federal Reserve Bank; the President having the right to reject these lists entirely, asking for new names. If, after three lists had been submitted, the President and the District Federal Reserve Bank could not agree, the President would choose from one list to be submitted by the Federal Reserve Board. The governor would be in charge of the District Federal Reserve Bank, the two deputy governors would be placed in charge of the regional federal reserve banks. The stock to which all the banks of the various branches subscribe would be that of the District Federal Reserve Bank.

If we review at this point the advantages that would be gained by a plan of this kind, it will become apparent:

First: The unit of each district is large enough to include varied forms of industrial, agricultural and commercial interests, so that the district will be able in itself to comply more readily with the demands that may spring up from time to time.

Second: For transfers and collections, the boundary line within which these will move freely has been enlarged.

Third: The local character of the branch boards which will deal with each individual case has been preserved, but the character of the board of the District Federal Reserve Bank, which will have to deal exclusively with larger problems of policy, from a higher point of view, without consideration of individual wishes, has been delocalized; it has lost its provincial character, all districts being represented.

Fourth: The four districts so created will be large enough to command confidence, and large enough to enable the development of discount markets. At the same time, the equality between all branches and between all regional banks has been preserved. For its local transactions the central point, *i. e.*, New Orleans, would have a board, constituted exactly like that of a branch, *e. g.*, Dallas. For its dealings with its branch banks, the regional of New Orleans would be in exactly the same position as that of St. Louis, and the District Federal Reserve Bank of St. Louis would be constituted from as many members of the New Orleans organization as that of St. Louis.

Full consideration has therefore been given to the apprehension that, by concentration, the sympathetic touch, to be preserved for each region, might be weakened, and that the central points might gain at the expense of the minor points. An organization of the kind here proposed would remove the reason for any such fear, the parity among all eight cities having been strictly safeguarded.

Fifth: If the plan be carried out that a portion or all of the stock of the Federal Reserve Bank is to be owned by the public, it stands to reason that the latter would much rather buy the stock of a larger organization than that of a smaller one, because the smaller ones are apt to feel to a stronger degree any losses that might be incurred. Moreover, the market for the purchase and sale of these stocks would be a more reliable one, if there were only four different kinds of stock, than if there were eight or ten.

Sixth: If at any time it should be found desirable to subdivide the districts into a larger number of regions, there would not be any difficulty in doing so under this plan, while the difficulty of reshaping the districts would be increased if stock had been sold of too many organizations.

It might be well to explain at this point what would be the functions of each of these three boards. The underlying principle of an organization as here proposed would be that each branch should be credited with the amount of the capital stock subscribed by its member banks and the aggregate amount of its deposits. On the other hand, each branch would be debited with the aggregate amount of its investment in commercial paper as well as its proportion of United States government bonds taken over and the circulation taken out by the regional federal reserve banks. Each branch once a week would give its status to the regional bank, which would consolidate all statements of the branches into one, showing the position of the regional bank. Each regional bank would then send the consolidated status and that of the individual branches to the District Federal Reserve Bank, and the latter would consolidate the statements of the regional banks into one, and send the same, with such additional in-

formation as might be required, to the Federal Reserve Board, which would publish regularly the consolidated and individual statements of the four District Federal Reserve Banks.

The regional board would apportion the funds among the branches, permitting, in its discretion, one branch, as a matter of bookkeeping, to draw on the funds of the others, or rather, to go deeper into its own reserves, judging by the consolidated status of all its branches the measure up to which each branch may be accommodated. In such deliberation it would be guided, of course, by the fact of whether or not such demands made by any branch were based upon seasonable and sound requirements. The District Reserve Board would, in turn, apportion in a similar way the funds between the two regionals, taking into full account the status of each regional and of its branches. It need hardly be repeated that fairness of dealing would be assured by having each regional board consist of members from each branch and by having the district board constituted by an equal number from both regionals.

The discussion just begun on the Senate floor has already shown the absolute necessity of dealing more explicitly with this question of branches. Atlanta desires to be made a federal reserve city, because she objects to being forced to rediscount at New Orleans. If this claim should be granted there would be a great many cities, equal or more important in size and banking power, which would justly insist on the same privilege. The consequence would be, that a large number of small and weak reserve districts would be created, a system which would be doomed beyond doubt. The plan as proposed by the writer would easily solve this problem in one of two ways: One method would be to subdivide the district into more than two *regions*, which could be done without weakening the power and basis of operation of the district. The other way would be to have Atlanta satisfied as a branch. If Atlanta understood that for her local business she would have a local, independent board, just the same as New Orleans, if she understood that the bills rediscounted at Atlanta will

normally remain until maturity in the hands of the Atlanta branch, if she understood that in the regional board she has the same vote as New Orleans, and that for the running of the business of the regional it is as immaterial whether the board be located at Houston, Dallas, Atlanta, or New Orleans, as it will be immaterial whether the district board is located at St. Louis or New Orleans, she should and would be quite satisfied to become a branch.[1] The actual business would be done by the branches, and the administrative organizations at the regional and district points would have the same neutral composition wherever they happened to be located. As the bill is drawn at present, it is quite unclear how these branches are to be constituted and what powers they are to have. If they were to be only agencies, run by managers, who would discount bills subject to the approval of the Federal Reserve Bank and who would have to forward these bills to these head points, Atlanta's objection would be fully justified. Moreover, such a slow and cumbersome system would prevent the development of a free discount system which should make the sale of discounts as quick and as responsive as the calling of a demand stock-exchange loan. It is to be assumed, however, that the framers of the Owen-Glass Bill have in mind some system of this kind. If they have not, if they intend to give local boards to each branch, it would be advisable to state this clearly and to let the member banks of the district of the branch have a voice in selecting some of the directors whom they know and trust. This would be better than to have the entire local branch board appointed by the Federal

[1] A Federal Reserve Bank including all the national banks of both Atlanta and Savannah would have a capital (on the basis of 6% of capital and surplus) of about $600,000 and deposits of $600,000 to $1,300,000. The Federal Reserve Bank, on a very liberal calculation, would then have resources of its own of less than $2,000,000. In normal times it might grant accommodations of $700,000, in strenuous times it might grant another $600,000. How long would it be till the Federal Reserve Bank of Atlanta would have given all the accommodation it could provide and would have to put its rates so high that any additional requirements would be satisfied from other quarters?

Would not Atlanta fare better and be more secure if she were part of a larger organization? The Atlanta rate would remain more stable and, as a matter of fact, Atlanta would be in a more dignified position.

Reserve Bank's board, on which there would probably be one single member only representing the district of the branch. Furthermore, as the Owen-Glass Bill is drawn at present, the anomaly would arise that any Federal Reserve Bank board would probably not have more than one single member who would be competent to pass on the local discounts of that federal reserve city. To illustrate: The Federal Reserve Bank board of New York would probably be constituted of members from New York, Philadelphia, Pittsburgh, Baltimore, Washington, D. C., Buffalo, Rochester, and possibly Boston. This composite board, on which there would not be more than one New York member, would have to pass on all the New York paper to be discounted by the New York Federal Reserve Bank. This is, of course, a dangerous and impossible situation. There should be in New York a local committee or board, as there should be in Philadelphia, and the composite board should deal only with questions of general policy, direction and supervision.

If the Federal Reserve Bank board or the Federal Reserve Board at Washington, or both together, should have the power to appoint all local boards or to pass exclusively on all purchases of discounts, there would be too much concentration of power in a small group of men,—the very thing that this legislation is planned to avoid.

It is not from a desire to be critical, but from a wish to be helpful, that these defects have been pointed out at such length. The writer is convinced that unless this question of branches be considered with more care a satisfactory system will not be created. There will be either a scattering of reserves or there will be a well-grounded apprehension of too much concentration of power.

Whether there be 4 Federal Reserve Banks with each about 16 branches, or 4 District Reserve Banks with 2 (or more) regionals, each with 8 branches, is of smaller importance. The writer strongly believes that the latter system is the better, because it will create clearer statistics and, for the governor in charge, a problem easier to handle.

This question of eight or four Federal Reserve Banks will be

easily understood if we translate it into military language. Should we be able effectively to maneuver eight armies, if we entirely disconnected them, not permitting them to communicate with one another or to come to one another's assistance, except by way of reporting to headquarters at Washington? Should we not have a better chance of success if above the generals in charge of each two of these armies we placed one leader, who had authority to detach reserves from one army and throw them to the assistance of the other, or throw both armies into one and divide them again, without costly and dangerous delay and long explanations which might be only half understood at headquarters? Would not the two armies feel safer and more certain of success? Would they not in fact be stronger than each standing alone? Again, would not the two army corps be better organized by having each an able general and one leader above them, than if the one leader were to manage alone the sixteen armies constituting the two army corps?

If the system is to succeed, the units by combination must be large enough to stand alone. If any one of them is so weak that it will frequently have to appeal to others, it will interfere with the others' safety and efficiency. Because, no matter how well the others might keep their own house in order, they could not foretell what their own available resources might be the next day.

Moreover, if these units, though large, are to show a clear picture, which must be fully understood in all its details, if the local and the Washington managements are to be successful, then men and figures must be grouped. The figures must be clarified and simplified and they must crystallize in the brain of the man in charge at each point. The four governors heading the four district Federal Reserve Banks must rely for their information on the two deputy governors in charge of the regionals, as these in turn would depend on the managers of the branch banks. It is not only the larger financial strength that is an absolute prerequisite for an effective system; it is just as important to reduce the problem to so simple and clear a form, assembling men and material,

that the Federal Reserve Board can intelligently and successfully deal with it.

It has been claimed that the Federal Reserve Board is not an administrative body, but merely a supervisory board. Nothing could be farther from the truth. If this system is to be crowned with success, the Federal Reserve Board must be an administrative board, and the larger the number of Federal Reserve Banks the more far reaching would become the power and administrative duty of the Federal Reserve Board.

An effective discount policy, an effective gold and foreign exchange policy and an effective method of dealing with the one-year treasury notes and 3% government bonds can be secured only by a strong and intelligent Federal Reserve Board. On the other hand, intelligence in all these very intricate questions can be displayed by the Federal Reserve Board only if it is in intimate touch with the conditions that exist, not at each point in this country alone, but also in each country of the entire globe. It is impossible for the seven or nine men, sitting in Washington in happy seclusion and far away from the business centers, to deal with these questions wisely, unless intimate touch with those centers be established where all these threads converge. It is true that in crystallizing the problems of the country up to four points the difficulties of the Federal Reserve Board will be materially reduced.

Instead of dealing with eight parts and instead of having the duty of equalizing reserves by helping one out of eight—and simultaneously of singling out one or more out of seven on whom to draw,—the problem would be reduced to judging one case out of four and distributing the burden among the other three. It is even more important that this question of distribution (which with eight centers might easily become a question of retribution), come before the board only rarely if at all. As to the problem of dealing with bank acceptances, foreign exchange, government bonds and gold, it is much easier to bring about an understanding between four members from large units that have lost their provincial character, than between eight units, where each would have in mind only the advantage of his own little corner.

While the problem has thus been simplified, and while it is conceivable that of the seven or nine members of the Federal Reserve Board, four might be delegated each to take particular charge of one of the four districts, the governor general and the other members of the Federal Reserve Board would still receive their information by an indirect and ineffective method. It would be infinitely better and would immeasurably strengthen the Federal Reserve Board, if the four governors of the four districts (who would have been appointed by the President) should actually become members of the Federal Reserve Board. These four governors would contribute and impart in a direct way to the other members of the Federal Reserve Board the actual business knowledge necessary to assure a wise management. At the same time a sorely needed opportunity would be given to these four heads of the four district banks to meet one another and to discuss with one another conditions as they existed in each district. This would enable them to form a clear judgment, not only of the conditions governing their district, but also of those of the other districts, and thus help them to decide upon a wise policy to be pursued by the Federal Reserve Board, not only for the entire country, but also for each district. In this respect the bill as drawn at present is entirely defective, because it does not provide at all for an exchange of views between the heads of the various Federal Reserve Banks. They run along disconnected from one another, where they should understand and help one another.

The advisory board as planned will not fill the gap. The men on that board cannot possibly have the knowledge, nor speak with the authority of the heads in actual charge, whose main duty it would be to understand and to explain the conditions of their particular district. Moreover, if these four heads, who are responsible for the weal and woe of their district, should have a vote on those questions that so deeply touch their own fate, there would be more confidence in every part of the system that conclusions, no matter whom they might hurt, had been reached with full knowledge, for the best of the country, and without fear or favor.

I should suggest that the Federal Reserve Board be cut into two parts, the one the discount committee, to consist of these four heads together with the governor general and two deputy governors general, to be appointed by the President; the other the committee of supervision, to consist of the Secretary of the Treasury and such other members as may be designated by the President. The discount committee would deal with all questions of routine and of business; the board of supervision would be in charge of the supervision of the entire system. Both together would form the Federal Reserve Board, which would pass upon all questions of rules and regulations. The discount committee should be able to act only with the consent of the governor general or the acting deputy governor general, and in case of disagreement, the question would have to be brought before the full board, where the Secretary of the Treasury would preside and would have the casting vote in case of a tie. The object of dividing the board in this way will be apparent without much explanation: It takes the government official out of the embarrassing position of normally passing upon questions of business, for which the governor general, appointed by the President, would be mainly responsible, but it gives him supreme power in case of a tie. Furthermore, it gives him supervisory power—which should be primarily the government's function—over the entire system.

The plan as here proposed appears to the writer as a compromise which might be acceptable to both sides to the controversy. It preserves the larger number of the regional reserve banks and branches which insure local independence and local sympathetic understanding, but at the same time it combines eight disconnected and weak units into four larger and stronger ones, which will be necessary for the development of any effective discount system.

As far as governmental influence is concerned, the government secures supervision from top to bottom. It secures a management appointed by the government at the top and down to the middle, where the functions of the regional and district Federal Reserve Bank boards will be those of ap-

portioning funds and of advising and deciding upon the rates at which accommodation should be granted. It leaves the majority at the branches in the hands of business men with a strong share in the management of men appointed by the government, with a strict supervision not only by the government, but also by the regional banks.

While the highest authorities of Europe, whose system, after all, we are copying, are practically a unit in stating that a perfect discount system can be established only through one single bank, I most confidently believe that—considering all the requirements of our case—we are safe and wise in starting with four units, provided they be properly organized and managed. But nothing will change my profound conviction that a system of eight Federal Reserve Banks, as now proposed, will end in failure. An effective discount rate is the link between the lever and the brake. Without an effective discount rate no European central bank would be able to stand. With eight independent districts (and even with six), no discount market can possibly develop. The safety of the system will be lacking, the member banks' funds will remain largely, as before, in the New York stock exchange. It seems scarcely justifiable to legislate the national banks into a position where they either would have to abandon their national bank charter and suffer a material loss on their government 2% bonds, or where, as the only alternative, they would have to throw in their lot with a system that, if carefully administered, could bring only very little relief and which, if managed without such extreme conservatism, would be bound to collapse. If the system be amended on lines as here proposed, objections against such constraint will largely be dispelled, and it might be expected that even a majority of the state banks and trust companies would join.

A management of great ability might, by its sagacity and impartiality in equalizing reserves, gradually diminish to a certain extent the only too natural apprehension and distrust of the banks. It might, in spite of the law—by encouraging meetings of the heads of the Federal Reserve Banks among themselves and with the Federal Reserve Board at Washing-

ton,—bring about, to a certain degree at least, the much needed coöperation. But, as planned at present, the heads of the eight or ten Federal Reserve Banks would be so busy at home and half of them so far away, that frequent trips to Washington would be impossible. The plan of having *district* Federal Reserve Banks would cure this defect, because the trips would be cut in two and the absence from duty would thereby be reduced to a minimum. The San Francisco manager would once or twice a month go to Denver, where he would meet the head of the Denver and Seattle regional banks. The governor of the Pacific district, living at Denver, would once or twice a month go to Washington. Moreover, as the Denver governor's duties do not entail any large amount of detail routine work, he would have and should have the necessary time for extended conferences at Washington. But any wise management, no matter how hard it tried by administrative measures to overcome the defects of the present bill, would be forced to remain close to the shore. The rates would have to be kept high and changes would have to be made frequently in order to keep the district from getting overcrowded or from upsetting the stability of the other districts. The men in charge, both at Washington and at the Federal Reserve Bank points, would work under a fatal handicap, which it would be cruel and reckless to inflict upon the nation.

It will take a few hours only to amend the bill on lines as here proposed; it will take weeks, and possibly months, of acrimonious debate if a proper basis for a compromise on these two questions cannot be found.

THE OWEN-GLASS BILL: GOLD OR LAWFUL MONEY, NOTE ISSUE, GOVERNMENT BONDS AND SIMILAR QUESTIONS

THERE has been a rather lively discussion in the papers and in Washington upon the question whether federal reserve notes should be paid by the Federal Reserve Banks in "gold" only or in "gold or lawful money;" and furthermore, whether federal reserve notes should be counted as reserves by member banks.

Let us first see what is lawful money. The answer is: gold dollars, silver dollars (not silver certificates), gold certificates and greenbacks. Any greenback presented at the treasury in Washington must be paid in gold. Moreover, as the United States have solemnly undertaken to keep all the various United States currencies at par, even silver certificates presented at Washington would, upon request, be exchanged into gold.

The amended Owen-Glass Bill provides that federal reserve notes are to be payable in gold at the United States Treasury and that the notes are to be the obligation of the United States. While it is correct that the United States must not be permitted to pay "one obligation by another," while the United States therefore must pay their notes in gold only, there is no reason why the Federal Reserve Banks should not redeem any obligation redeemable at their counters by paying in lawful money. If the Federal Reserve Banks were forced by law not to count lawful money as reserve and if they were forbidden to redeem federal reserve notes in lawful money, it would mean that by legislative enactment they were obliged to discredit the sacred pledge of the United States. It would damage the credit of the United States and quite naturally lead to a discrimination between the two kinds of notes which the United States have promised to pay in gold, a most illogical and unwarranted proceeding.

A similar argument must be applied in dealing with the federal reserve notes as reserves of member banks. Reserves of national or state banks or trust companies have been created for the purposes of providing that these institutions should have available in currency at all times a certain proportion of their deposits, so as to enable them to pay off immediately upon demand substantial amounts of their demand obligations.

All debts are by law payable in lawful money and the Owen-Glass Bill provides specifically that federal reserve notes be accepted in payment of all taxes and public dues except customs. Is it conceivable that a note which is the obligation of the United States payable at the treasury in gold and which is receivable for all taxes and public dues as above, shall not be considered as legal tender for any other purpose except the payment of taxes? Would Congress enact a law by which a bank or a private firm might refuse to accept in fulfilment of a contractual obligation a note issued by the United States payable in gold? As long as this note is to be the obligation of the United States let us at least be logical and bold about it and give to this currency the full recognition and privileges to which it is entitled.

If a national bank could not pay out federal reserve notes to any other bank or depositor, how could we expect the member banks to give up their gold certificates and take federal reserve notes instead? The strength of the future system will depend, however, upon the amount of gold that the Federal Reserve Banks are able to assemble in their vaults by substituting the new notes for the old United States currency now in circulation. But if national banks are to be permitted to pay their depositors in federal reserve notes, why should such notes not be considered reserve money?

Moreover, if a balance with the Federal Reserve Bank is to be counted as cash by a national bank, how is it possible that a note should not be so counted? Notes could be turned into balances and balances into notes. How is it possible to discriminate between the two? At the close of business each national bank might send over to the Federal Reserve Bank or branch its federal reserve notes and have them credited to

its account, taking them back the next morning for use as till money. In that case the balance over night would count as reserve. If the bank happened to keep the notes over night in its own vaults, it is claimed that they should *not* be counted as reserve. Could anybody imagine any theory more confused and untenable?

In the writer's opinion, there cannot be any doubt whatsoever that the Hitchcock committee errs when it insists that federal reserve notes presented for payment at the Federal Reserve Banks must be paid in gold alone. They ought to be payable in lawful money. Furthermore, it goes astray when it bars federal reserve notes as legal reserve for member banks. Member banks are to observe only the commercial point of view of having a safe proportion of their deposits in cash balances or actual cash. Federal Reserve Banks are to maintain a safe proportion between their on-demand obligations and available lawful money. But it is the United States' function and duty to provide for the fulfilment of its own promise at all times to pay in gold the notes issued by the United States as payable in gold.

The latest amendment by the Democratic caucus, creating a new circulating note to be the obligation of the Federal Reserve Banks and to be secured by the 2% government bonds purchased from member banks, can be considered only as a most regrettable error of judgment. If, as has been claimed, the federal reserve notes must be primarily an obligation of the United States, and the Federal Reserve Banks must not be permitted to issue the same as their own obligation to be guaranteed by the United States, and if, as has been stated in justification of this point of view, the people of the United States would not consider themselves safe except with a direct government note, how can we be expected to consider favorably this latest proposition? This circulating note of the Federal Reserve Banks is to be secured by government bonds —is not that a Federal Reserve Bank note secured by a guarantee of the United States?

There is only one difference, that the previous recommendations, which were declined, had in mind a note issued by the

Federal Reserve Banks guaranteed by the United States, but covered by commercial paper, a certain amount of government bonds *and an ample gold reserve; but all notes were to be an equal first lien on the assets of the Federal Reserve Banks.* The Democratic caucus now provides a 35% gold cover and a first lien for the notes of the government, and expects the Federal Reserve Bank notes to be absorbed as second mortgage notes, apparently without an equal gold protection, while the old national bank notes—after the national banks have placed the bulk of their cash in the hands of the Federal Reserve Banks for the protection of the government notes—are to continue as third mortgage notes, until the last remnant of this unfortunate national bank circulation shall be redeemed after thirty years from the passage of this law! That the Secretary of the Treasury is to be clothed with the power to permit national banks to count their own notes as reserve is another aberration which suggests the question whether a merchant would be kept out of jail if, by permission of the Secretary of the Treasury, in making up his balance sheet he counted his own promissory notes as quick assets.

The problem of dealing with the government bonds and the national bank circulation is a perplexing one, and we must, unfortunately, face the fact that for the next few years at least we shall have to be satisfied with some system which will not be quite free from theoretical and, to a certain extent, actual defects. But should we not try to create a system which will shorten as much as possible these years of transition and which, after that period, will become logical, sound and simple?

Is it not clear that we must work toward *one* note issue? Think of the anomalous conditions that would arise if on the one hand the federal reserve organization, by a liberal policy of note issue, should force the national bank notes to quick redemption and out of circulation and if, on the other hand, at times when the federal reserve policy aimed at contraction of circulation, the national banks again began to put out their circulating notes. The note-issue policy must coöperate with the general discount policy, and both should be thrown into one hand as quickly as possible.

Sufficient consideration does not appear to have been given to the fact that when once the banks have thrown their reserves together with the Federal Reserve Banks—no matter whether the circulating notes are still being issued by the national banks individually—any obligation to redeem them in gold, in case of contraction or foreign demand, will fall upon the Federal Reserve Banks and incidentally on the United States, which for the redemption of its federal reserve notes must rely on the strength and solvency of the Federal Reserve Banks. The Federal Reserve Banks, from the point of view of gold cover, will have to consider as their own obligations the national bank currency, whether or not they assume this from the start.

It would therefore be the wisest and safest plan to assume the national bank circulation as rapidly as possible, so that, as long as the responsibility rests with the Federal Reserve Banks, they will at least at the same time become the owners of the assets securing this circulation and so that they may receive the benefit of the profits of this circulation, without which, it is to be feared, they will not have a sufficient earning power.

However, the taking over of all government bonds at once would alienate the country banks, which do not want to forego their note-issuing privilege so rapidly, and it would frighten a great many individuals, who are unable to perceive that the difference is only one of form. Moreover the formal status of the Federal Reserve Banks would be greatly weakened with respect to the gold cover to be provided against notes issued to them by the Federal Reserve Board against these purchases of 2% government bonds. Let us assume as the first year's balance sheet the following statement, in millions:

Assets		*Liabilities*	
Discounts	$150	Capital paid in	$50
Cash	450	Deposits from Banks	400
3% Gov't Bonds	350	Treasury	150
3% One-Year Treas. Notes	350	Notes	700
	$1,300		$1,300

This would mean a gold cover for notes of 64%, and for liabilities of 35%, which latter percentage would leave little room for a liberal increase of the note issue with which to supply the commercial requirements of the nation. If, however, we assume that within the next five years it would be possible to substitute $500,000,000 new federal reserve notes for lawful money in circulation the balance sheet would look as follows:

Discounts	$150	Capital	$50
Cash	950	Deposits	400
3% Gov't Bonds	350	Treasury	150
3% One-Year Treas. Notes	350	Notes	1,200
	$1,800		$1,800

This would show a gold cover for notes of almost 80% and for liabilities of about 50% and would leave a high margin of safety for the accommodation of the member banks and for the status of the Federal Reserve Banks. The further this substitution of Federal Reserve Bank notes for lawful money circulation proceeded the stronger would become the Federal Reserve Banks and with that the position of the United States.

It follows, then: First, there must be only one kind of notes, which must be eagerly accepted by the people and the member banks. The federal reserve treasury note must therefore have all legal-tender qualities, except payment for customs, and must be counted as reserve money by the member banks. Otherwise the free substitution of new notes for old will be interfered with. Second, as rapidly as this substitution proceeds, the Federal Reserve Banks, with the approval of the Federal Reserve Board and the Secretary of the Treasury, ought to be permitted to increase the purchase and conversion of the 2% government bonds.

How quickly this process can be carried on, nobody is in a position to foretell today. It would therefore be a mistake to attempt now to lay down a hard and fast program for the future. The law should be so framed as to give ample latitude in this respect to the men to be placed in charge, who should be able to meet conditions as they arise.

I should suggest that the law be amended so as to provide that the Federal Reserve Board purchase from the member banks no less than 5% annually of the aggregate face value of the 2% United States government bonds outstanding as a basis for national bank circulation at the time of the passing of the law, but that the national banks be required to turn over annually up to 10% of said aggregate amount, in case the Federal Reserve Board, with the approval of the Secretary of the Treasury, should decide to purchase up to that quota. It should furthermore provide that additional amounts may be purchased in the open market, in case the Federal Reserve Board, with the approval of the Secretary of the Treasury, should think this advisable. If this method be applied, the national bank circulation could be eliminated within ten years, provided the status of the Federal Reserve Banks permitted.

As the acquisition of the 2% bonds proceeded, the Federal Reserve Banks would convert the same half and half into United States government 3% twenty-year bonds, and one-year United States treasury notes, to be renewed annually as provided in the bill. The Federal Reserve Board, with the approval of the Secretary of the Treasury, should have full power to dispose of the twenty-year 3% government bonds. They might find it desirable to retain the bulk of these bonds. If, however, for the permanent strengthening of the status of the Federal Reserve Banks, it should be advisable to dispose of a portion of the bonds, the management can be trusted to do so in the best manner, adapting itself to the conditions as they exist from time to time. No legislative body can foresee now what these conditions will be. The one-year notes would normally be held in the treasury of the Federal Reserve Banks and form there a most valuable means of combating emergency situations as they might arise. They should be the free property of the Federal Reserve Banks, and the Federal Reserve Board should have full power to deal with them.

It should be the object of this law to secure under strict governmental supervision the best possible board and the most efficient management, and to lay down the broad rules upon which the future institution is to be run. But no warning can

be too emphatic not to attempt to legislate too strictly concerning questions of administration. I believe it is a fair statement that there is not a single member in either house of Congress who would feel qualified to undertake the management of this future institution. How then can they be expected to prescribe in the law details of administration whose effect cannot now be foreseen?

This refers not only to the question of government bonds, but to the question of discounting. The general principle ought to be that—as in the majority of the European central banks—normally no paper should be bought having more than ninety days to run. Inasmuch as the law as drawn at present contains an emergency clause which would enable the board to purchase all kinds of obligations of the banks in case of need, it appears quite unnecessary to provide, as proposed in the Hitchcock amendment, that bills having a maturity up to 180 days and not to exceed $200,000 might be bought from each member bank. This clause looks petty and small, and would not warrant the breaking down of an important principle. In a similar way the Hitchcock amendment goes astray when it fixes a minimum amount that any bank at any time may require the Federal Reserve Banks to rediscount for it, and when it determines *now* the increase in rates for any additional rediscounts the member bank might require. The Federal Reserve Banks' management must be trusted to be fair and reasonable; it would be unwise to place it in a position where it could be dictated to or where it would have to be acting against its better judgment. Instead of laying down iron-clad laws, it might be better to insert a broader clause which would permit the Federal Reserve Board from time to time to establish rules, permitting or requiring the Federal Reserve Banks to charge a higher rate than the regular bank rate published, when member banks ask for rediscounts in excess of certain limits to be fixed by the Federal Reserve Board. This would give the Federal Reserve Banks and the Federal Reserve Board a means of protecting themselves, in case they found it necessary, but it would not bind their hands unnecessarily as long as a healthy supply of legitimate bills was offered for rediscount.

In closing, the question of the ownership of stock of the Federal Reserve Banks might be touched upon. This ought to be dealt with from a similar point of view. It might prove a good basis for a compromise if the member banks, who are to be required to subscribe for the stock, were to be permitted, after three years and with the approval of the Federal Reserve Board and the Secretary of the Treasury, to sell all or a certain portion of their stock holdings, provided, however, that each bank remained responsible to its Federal Reserve Bank for the liability following the stock certificate. If this plan were adopted the public would not now be asked to subscribe for a stock which during the first few years might conceivably not earn its full dividend. The banks, on the other hand, would not be required indefinitely to tie up their own resources, which part of the scheme appears to be most objectionable to them.

It is not the desire of the writer to go further into a discussion in detail of the various sections of the law, but rather to confine himself to the above remarks, concerning a few of the main points. However, he ventures to hope that his arguments may have convinced the reader that the amendments as proposed by the two Senate committees cannot, by any means, lay claim to being considered as final and definite conclusions. Further careful deliberation will be necessary if the law is to become as perfect as the nation may justly expect. Much as speedy legislation must be desired by everybody, the problem appears to demand further open-minded discussion by calm and intelligent brains. Rather than to drive it roughshod to a quick conclusion, as a party measure upon which the final word has already been spoken, it would seem that the shorter and, in the long run, the better way would be for both sides to give and take and to agree upon the middle course, for safety lies between the cliffs.

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